

APPENDIX I

CATALOG OF THE
VASCULAR PLANTS OF
GLEN CANYON NRA,
UTAH AND ARIZONA

By Mar-Elise Hill

August 2005

Thesis for Master of Science in Biology

Northern Arizona University

Flagstaff, Arizona

Species are first arranged by divisions: Pteridophyta, Coniferophyta, and Magnoliophyta. Magnoliophyta is further divided into the classes Magnoliopsida (dicots) and Liliopsida (monocots). Taxa are finally arranged alphabetically by families, genera, and species. Nomenclature and common names follows “A Utah Flora” (Welsh et al., 2003) with updates from the USDA PLANTS database (2004). Species names preceded by an asterisk (*) denotes taxa non-native to the Glen Canyon NRA region. The following information is provided for each species, when available:

- A. Common name
- B. Relevant synonyms in brackets.
- C. Plant duration and growth form (habit).
- D. Distribution within the study area. Distribution ratings are solely based on the subjective observations of the author. These ratings are relevant only within the study site boundaries and are usually specific to any internal locality regions listed. Table 8 lists distribution codes and definitions used in this study.
- E. Where species can most likely be found.
- F. Specimen information. Collection numbers follow the initials of the collector (Table 9). If no collection number is given the herbaria at which the collection is housed is given (GLCA HERB= Glen Canyon NRA Herbarium and ASC = Deaver Herbarium, Northern Arizona University, Flagstaff), for all other locations of vouchers refer to table 9.
- G. Subspecific taxa characteristics. When there are two subspecific taxa listed under the same species the characteristics that is used to separate the subspecific taxa is given.

LYCOPODIOPHYTA:

Selaginellaceae

Selaginella mutica D.C. Eat. ex Underwood - BLUNTLEAF SPIKEMOSS
Perennial herb; O, rock crevices, Clearwater Canyon; JRS 5025.

EQUISETOPHYTA:

Equisetaceae

Equisetum ferrissii Clute (pro sp.) -
Perennial herb; C, riparian; MDW 257-B.

Equisetum arvense L. - FIELD HORSETAIL
Perennial herb; O, riparian; MH 245, MDW 258-B.

Equisetum hyemale L. var. *affine* (Engelm.) A.A. Eat. - SCOURINGRUSH HORSETAIL
Perennial herb; O, riparian; JF 892.

Equisetum laevigatum A. Braun - SMOOTH HORSETAIL
[*Equisetum kansanum* Schaffn.] Perennial herb; O, riparian; MH 204, MDW 259-B.

PTERIOPHYTA:

Dryopteridaceae

Cystopteris utahensis Windham & Haufler - UTAH BLADDERFERN
Perennial herb; U, moist shaded sites, Cow Canyon, Coyote Gulch, and Halls Creek; JRS 4977, 5224.

Pteridaceae

Adiantum capillus-veneris L. - COMMON MAIDENHAIR
Perennial herb; C, hanging gardens; DG 10, 13.

Argyrochosma limitanea (Maxon) Windham ssp. *limitanea* (Maxon) Windham -
SOUTHWESTERN FALSE CLOAK FERN
[*Pellaea limitanea* (Maxon) Morton] Perennial herb; U, rock crevices, canyon bottoms;
MH 387.

Cheilanthes feei T. Moore - SLENDER LIPFERN
Perennial herb; U, Kaiparowits Platea; JRS 5647.

Pellaea glabella Mett. ex Kuhn - SEARLS' PRAIRIE CLOVER
Perennial herb; U, crevices and hanging gardens; GR 4228.

Pellaea truncata Goodding - SPINY CLIFFBRAKE
[*Pellaea longimucronata* auct. non Hook.] Perennial herb; U, rock crevices, Trail
Canyon; SLW 11910.

GNETOPHYTA:

Ephedraceae

Ephedra cutleri Peebles - CUTLER'S JOINTFIR

Shrub; C, sandy flats, desert shrub to pinon-juniper; MH 638.

Ephedra torreyana S. Wats. - TORREY'S JOINTFIR

Shrub; W, dry sandy or rocky hillsides; MH 433.

Ephedra viridis Coville - MORMON TEA

Shrub; W, desert shrub to pinon-juniper woodlands; MH 25, 115.

CONIFEROPHYTA:

Cupressaceae

Cupressus arizonica Greene - ARIZONA CYPRESS

Tree; O, Cultivated landscaping, Wahweap Campground; MH 661.

Juniperus osteosperma (Torr.) Little - UTAH JUNIPER

[*Juniperus utahensis* (Engelm.) Lemmon] Tree; W, uplands, hillsides, mesas, and benches; MH 273.

Pinaceae

Pinus edulis Engelm. - TWONEEDLE PINYON

Tree; W, mesas, benches, and hillsides; MH 559, JRS 5235.

Pinus monophylla Torr. & Frém. var. *fallax* (Little) Silba - SINGLELEAF PINYON

[*Pinus edulis* Engelm. var. *fallax* Little] Tree; U, Kaiparowits Plateau; JRS 5657.

Pseudotsuga menziesii (Mirbel) Franco - DOUGLAS-FIR

Tree; U, canyons, Miller's and Millard Canyons; JRS 5058.

MAGNOLIOPHYTA: MAGNOLIOPSIDA

Aceraceae

Acer glabrum Torr. - ROCKY MOUNTAIN MAPLE

Tree; U, canyons, Happy Canyon; SLW 21847.

Acer grandidentatum Nutt. - BIGTOOTH MAPLE

Tree; U, canyons and Kaiparowits Plateau; MH 732.

Acer negundo L. - BOXELDER

Tree; O, canyons, seeps, and springs; MH 203.

Aizoaceae

**Trianthema portulacastrum* L. - DESERT HORSEPURSLANE

Annual herb; O, disturbed sites; MH 352, 395.

Amaranthaceae

Amaranthus acanthochiton Sauer - GREENSTRIPE

[*Acanthochiton wrightii* Torr.] Annual herb; R, saline wetlands, junction of San Juan and Colorado Rivers; KH 19267.

**Amaranthus albus* L. - PROSTRATE PIGWEED

[*Amaranthus graecizans* auct. non L.] Annual herb; O, disturbed sites; MH 308, 571, 703.

**Amaranthus blitoides* S. Wats. - MAT AMARANTH
Annual herb; O, disturbed sites; MH 284.

Amaranthus californicus (Moq.) S. Wats. - CALIFORNIA AMARANTH
Annual herb; U, disturbed areas; KH 21009.

Tidestromia lanuginosa (Nutt.) Standl. - WOOLLY TIDESTROMIA
Annual herb; O, clayey soils, desert shrub; MH 364.

Anacardiaceae

Rhus glabra L. - SMOOTH SUMAC

Shrub; U, canyon bottoms and hanging gardens, riparian; JRS 4972, SLW 21762.

Rhus trilobata Nutt. var. *simplicifolia* (Greene) Ba - SKUNKBUSH SUMAC

[*Rhus aromatica* Ait.] Shrub; C, canyons and uplands; NDA 3461, SLW 21861 & 22212.lvs. simple

Rhus trilobata Nutt. var. *trilobata* Nutt. - SKUNKBUSH SUMAC
Shrub; O, canyon bottoms, riparian; MH 150, 348.lvs. trifoliate

Toxicodendron rydbergii (Small ex Rydb.) Greene - WESTERN POISON IVY

[*Rhus radicans* L.] Perennial herb; O, canyon bottoms and hanging gardens, riparian; SLW 1486.

Apiaceae

Berula erecta (Huds.) Coville - CUTLEAF WATERPARSNIP

Perennial herb; U, riparian, Scorpion Canyon; JRS 5227.

Cymopterus acaulis (Pursh) Raf. var. *fendleri* (Gray) Goodrich - FENDLER'S SPRINGPARSLEY

[*Cymopterus fendleri* Gray] Perennial herb; O, sandy soils, desert shrub to pinon-juniper woodlands; MH 550, GR 1720.flwrs. whitish

Cymopterus acaulis (Pursh) Raf. var. *higginsii* (Welsh) Goodrich - HIGGINS' SPRINGPARSLEY

[*Cymopterus higginsii* Welsh] Perennial herb; U, shale soils, desert shrub; JRS 5223.flwrs. purple, growing on Tropic Shale

Cymopterus newberryi (Wats.) Jones - SWEETROOT SPRINGPARSLEY

Perennial herb; O, sandy soils; MH 601, 455.

Cymopterus purpurascens (Gray) Jones - WIDEWING SPRINGPARSLEY

Perennial herb; O, canyons, Happy Canyon; SLW 21790.

Cymopterus purpureus Wats. - PURPLE SPRINGPARSLEY

Perennial herb; O, hillsides and mesas, pinon-juniper woodlands; MH 175, 610.

Lomatium nevadense (S. Wats.) Coulter & Rose - NEVADA BISCUITROOT

Perennial herb; U, Kaiparowits Plateau; JRS 5655.

Lomatium parryi (Wats.) Macbr. - UTAH DESERTPARSLEY

Perennial herb; U, rimrock, Muley Point; MH 516.

Apocynaceae

Amsonia jonesii Woods. - JONES' BLUESTAR

Perennial herb; U, desertshrub, San Juan River and Leroy Canyon; KH 21010.

Amsonia tomentosa Torr. & Frém. var. *stenophylla* Kearney & Peebles - WOOLLY BLUESTAR

[*Amsonia eastwoodiana* Rydb.] Perennial herb; C, canyon bottoms, hillsides, mesas, and benches; MH 47, 180, 196, 380, 529, 578.

Apocynum cannabinum L. - INDIANHEMP

[*Apocynum suksdorfii* Greene] Perennial herb; O, canyon bottoms, riparian; SLW 1482, KH 19283.

Cycladenia humilis Benth. var. *jonesii* (Eastw.) Welsh & Atwood - JONES' WAXYDOGBANE

[*Cycladenia jonesii* Eastw.] Perennial herb; R, clayey soils, Purple Hills; BTW 1442.

Araliaceae

Aralia racemosa L. ssp. *bicrenata* (Woot. & Standl.) Welsh & Atwood - AMERICAN

SPIKENARD

Perennial herb; R, Cow Canyon; JRS 4976.

Asclepiadaceae

Asclepias asperula (Dcne.) Woods. ssp. *asperula* (Dcne.) Woods. - SPIDER MILKWEED

Perennial herb; U, canyon bottoms, hillsides, and uplands, desert shrub to pinon-juniper; MH 602, SLW 22807.

Asclepias cryptoceras S. Wats. - PALLID MILKWEED

Perennial herb; U, hillsides and mesas, pinon-juniper woodlands, Flint Trail; SLW 9876.

Asclepias involucrata Engelm. ex Torr. - DWARF MILKWEED

[*Asclepias macrosperma* Eastw.] Perennial herb; O, sandy soils, desert shrub; MH 101, 506.

Asclepias latifolia (Torr.) Raf. - BROADLEAF MILKWEED

Perennial herb; O, canyon bottoms, hillsides, and uplands, desert shrub; MH 231, SLW 22316.

Asclepias rusbyi (Vail) Woods. - RUSBY'S MILKWEED

Perennial herb; U, canyon bottoms, Slickhorn Canyon; NDA 22593.

Asclepias subverticillata (Gray) Vail - HORSETAIL MILKWEED

[*Asclepias galoides* auct. non Kunth] Perennial herb; O, canyon bottoms; MH 223.

Funastrum cynanchoides (Dcne.) Schlechter ssp. *heterophyllum* (Vail) Kartesz, comb. nov. ined.

- HARTWEG'S TWINEVINE

Perennial herb; O, riparian; MH 278.

Asteraceae

Acamptopappus sphaerocephalus (Harvey & Gray ex Gray) Gray - RAYLESS GOLDENHEAD

Shrub; C, uplands, desert shrub; MH 456.

Acourtia wrightii (Gray) Reveal & King - BROWNFOOT

[*Perezia wrightii* Gray] Perennial herb; U, canyon bottoms, Dry Rock Creek; SLW & NDA 11641.

**Acroptilon repens* (L.) Dc. - HARDHEADS

[*Centaurea repens* L.] Perennial herb; O, riparian, Lee's Ferry and San Juan River; MH 583, JM s.n.(GLCAHERB).

Ambrosia acanthicarpa Hook. - FLATSPINE BURR RAGWEED

[*Franseria acanthicarpa* (Hook.) Coville] Annual herb; U, disturbed sites, riparian; MH 341.

Ambrosia psilostachya Dc. - CUMAN RAGWEED

Perennial herb; U, disturbed sites, riparian; MH 715.

Artemisia bigelovii Gray - BIGELOW SAGE

Shrub; C, rimrock areas, pinon-juniper woodlands; MH 370.

Artemisia campestris L. - FIELD SAGEWORT

Perennial herb; O, sandy sites; SLW 22409, NDA 3058.

Artemisia carruthii Wood ex Carruth. - CARRUTH'S SAGEWORT

Perennial herb; U, pinon-juniper woodlands, Muley Point; SLW 22440.

Artemisia dracunculus L. - TARRAGON

Perennial herb; C, canyons; NDA 23338, JRS 5041.

Artemisia filifolia Torr. - SAND SAGEBRUSH

Shrub; O, sandy sites; SLW 22401, NDA 3118, AP 80-162.

Artemisia ludoviciana Nutt. - WHITE SAGEBRUSH

Perennial herb; W, canyons, uplands, and plateaus; MH 342.

Artemisia ludoviciana Nutt. ssp. *mexicana* (Willd. ex Spreng.) Keck - WHITE SAGEBRUSH

Perennial herb; O, Happy Canyon; JT 608.

Artemisia nova A. Nels. - BLACK SAGEBRUSH

Shrub; U, canyon bottoms, Long Canyon; JRS 5048.

Artemisia tridentata Nutt. ssp. *tridentata*- BASIN BIG SAGEBRUSH

Shrub; C, plateaus; NDA 3297a.plants 1-3m tall

Artemisia tridentata Nutt. ssp. *wyomingensis* Beetle & Young - WYOMING BIG SAGEBRUSH

Shrub; O, pinon-juniper woodlands, Orange Cliffs; LMS 7347.plants <1m tall

Baccharis emoryi Gray - EMORY'S BACCHARIS

Shrub; C, riparian; SLW 22547.

Baccharis salicifolia (Ruiz & Pavón) Pers. - MULE'S FAT

[*Baccharis glutinosa* Pers.] Shrub; O, riparian; MH 700, NDA 23367.

Baccharis salicina Torr. & Gray - GREAT PLAINS FALSE WILLOW

Shrub; O, riparian; MH 404.

Baccharis wrightii Gray - WRIGHT'S BACCHARIS

Perennial herb; R, uplands, bench below Cedar Mesa; MH 670.

**Baileya multiradiata* Harvey & Gray ex Gray - DESERT MARIGOLD

Perennial herb; C, roadsides; JZ 15.

Bidens frondosa L. - DEVIL'S BEGGARTICK

Annual herb; O, canyon bottoms, riparian; MH 402.

Brickellia attractylloides Gray - SPEARLEAF BRICKELLBUSH

Shrub; O, hillsides; MH 485.

Brickellia longifolia S. Wats. - LONGLEAF BRICKELLBUSH

Shrub; C, canyon bottoms, washes, and hanging gardens, riparian; MH 390, AP 80-153.

Brickellia microphylla (Nutt.) Gray var. *scabra* Gray - ROUGH BRICKELLBUSH

Shrub; O, canyons, hillsides, and rocky outcrops; MH 389.

Brickellia oblongifolia Nutt. var. *linifolia* (D.C. Eat.) B.L. Robins. - NARROWLEAF

BRICKELLBUSH

Shrub; O, hillsides, pinon-juniper woodlands; MH 137.

Chaenactis macrantha D.C. Eat. - BIGHEAD DUSTYMAIDEN
Annual herb; C, sandy soils, desert shrub; MH 27.

Chaenactis stevioides Hook. & Arn. - STEVE'S DUSTYMAIDEN
Annual herb; W, canyon bottoms, benches, and hillsides, desert shrub; MH 16, 31.

Chaetopappa ericoides (Torr.) Nesom - ROSE HEATH
Perennial herb; C, hillsides, rocky slopes, and benches; MH 110.

Chloracantha spinosa (Benth.) Nesom - SPINY CHLORACANTHA
[*Aster spinosus* Benth.] Perennial herb; C, riparian, Lee's Ferry and San Juan River; MH 214, VM s.n. (GLCAHERB), JM s.n.(GLCAHERB).

Chrysothamnus baileyi Woot. & Standl. - BAILEY'S RABBITBRUSH
[*Chrysothamnus pulchellus* (Gray) Greene] Shrub; O, benches, Orange Cliffs; BN 694.

Chrysothamnus greenei (Gray) Greene - GREENE'S RABBITBRUSH
Shrub; O, benches, pinon-juniper woodlands; LMS 7366.

Chrysothamnus linifolius Greene - SPEARLEAF RABBITBRUSH
Shrub; O, canyon bottoms, riparian; MH 237.

Chrysothamnus viscidiflorus (Hook.) Nutt. ssp. *viscidiflorus* var.*stenophyllus*(Gray) Hall -
YELLOW RABBITBRUSH
[*Chrysothamnus viscidiflorus* (Hook.) Nutt. ssp. *stenophyllus* (Gray Hall),] Shrub; C,
benches, mesas, and rocky outcrops, desert shrub to pinon-juniper woodlands; MH 363,
729.

*Cirsium arizonicum*var. *arizonicum* (Gray) Petrak - ARIZONA THISTLE
Biennial herb; C, canyon bottom, washes, and drainages; MH 228, 677, 275.

Cirsium calcareum (M.E. Jones) Woot. & Standl. - CAINVILLE THISTLE
[*Cirsium pulchellum* (Greene) Woot. & Standl.] Perennial herb; O, canyon bottoms,
riparian; MH 371.

Cirsium neomexicanum Gray - NEW MEXICO THISTLE
Biennial herb; O, roadsides, canyon bottoms, and hanging gardens; MH 41, 595, GR
1713.

Cirsium rydbergii Petrak - RYDBERG'S THISTLE
Perennial herb; C, hanging gardens; JF 826.

Cirsium undulatum (Nutt.) Spreng. - WAVYLEAF THISTLE
Perennial herb; U, canyon bottom; NDA 22567.

**Cirsium vulgare* (Savi) Ten. - BULL THISTLE

Biennial herb; U, disturbed sites, riparian, upstream from Lee's Ferry; MH 403.

Conyza canadensis (L.) Cronq. var. *glabrata* (Gray) Cronq. - CANADIAN HORSEWEED

Annual herb; O, canyon bottoms, disturbed sites; MH 716, 683, 697, JF 960.

Dicoria canescens Gray ssp. *brandegeei* (Gray) Kartesz, comb. Nov. ined. - DESERT

TWINBUGS

[*Dicoria brandegeei* Gray] Annual herb; U, canyons, sandy sites; JRS 5004, 4983, SLW 22413.

Encelia frutescens (Gray) Gray var. *frutescens* (Gray) Gray - BUTTON BRITTLEBUSH

Shrub; C, talus slopes and slickrock, desert shrub; MH 114.

Enceliopsis nudicaulis (Gray) A. Nels. - NAKEDSTEM SUNRAY

Perennial herb; O, hillsides, desert shrub; MH 594, SLW 21927.

Ericameria nauseosa (Pallas ex Pursh) Nesom & Baird ssp. *consimilis* (Greene) Nesom & Baird var. *juncea* (Greene) Nesom & Baird - RUBBER RABBITBRUSH

[*Chrysothamnus nauseosus* (Pallas ex Pursh) Britt. var. *junceus* (Greene) Hall & Clements,] Shrub; O, canyon bottom, mesas, and benches; SLW 22523 Achene/ovary pilose; corolla pilose.

Ericameria nauseosa (Pallas ex Pursh) Nesom & Baird ssp. *consimilis* (Greene) Nesom & Baird var. *leiosperma* (Gray) Nesom & Baird - RUBBER RABBITBRUSH

[*Chrysothamnus nauseosus* (Pallas ex Pursh) Britt. ssp. *leiospermus* (Gray) Hall & Clements,] Shrub; O, canyon bottoms, Reflection Canyon; SLW 1182. Achene/ovary glabrous; flwrs <8mm long.

Ericameria nauseosa (Pallas ex Pursh) Nesom & Baird ssp. *consimilis* (Greene) Nesom & Baird var. *oreophila* (A. Nels.) Nesom & Baird - RUBBER RABBITBRUSH

[*Chrysothamnus nauseosus* (Pallas ex Pursh) Britt. ssp. *consimilis* (Greene) Hall & Clements,] Shrub; O, desert shrub; MH 362. Achene/ovary pilose; corolla glabrous, lobes >1mm; lvs 1 nerved.

Ericameria nauseosa (Pallas ex Pursh) Nesom & Baird ssp. *nauseosa* var. *bigelovii* (Gray)

Nesom & Baird - RUBBER RABBITBRUSH

[*Chrysothamnus nauseosus* (Pallas ex Pursh) Britt. var. *bigelovii* (Gray) Hall & Clements,] Shrub; O, Canyon bottoms, Hite; SLW 22652. Achene/ovary glabrous; flwrs >8mm long.

Ericameria nauseosa (Pallas ex Pursh) Nesom & Baird ssp. *nauseosa* var. *glabrata* (Gray)

Nesom & Baird - RUBBER RABBITBRUSH

[*Chrysothamnus nauesosus* (Pallas ex Pursh) Britt. var. *graveolens* (Nutt.) Piper,] Shrub; W, canyon bottoms, mesas, and benches; MH 719, KH 21003. Achene/ovary pilose; corolla glabrous, lobes >1mm; lvs 3-5 nerved.

Ericameria nauseosa (Pallas ex Pursh) Nesom & Baird ssp. *nauseosa* var. *hololeuca* (Gray)
Nesom & Baird - RUBBER RABBITBRUSH

[*Chrysothamnus nauesosus* (Pallas ex Pursh) Britt. var. *gnaphalooides* (Greene) Hall & Clements,] Shrub; O, canyon bottoms; SLW 2836, NDA 17267. Achene/ovary pilose; corolla glabrous, lobes <1mm long.

Erigeron bellidiastrum Nutt. var. *bellidiastrum* - WESTERN DAISY FLEABANE
Annual herb; W, sandy soils, canyon bottoms; MH 52, 60, 88, 253, 294, 326.

Erigeron colomexicanus A. Nels. - RUNNING FLEABANE
Biennial herb; O, dry washes; MH 50.

Erigeron concinnus (Hook. & Arn.) Torr. & Gray var. *concinnus* - NAVAJO FLEABANE
[*Erigeron pumilus* Nutt. ssp. *concinnoides* Cronq.,] Perennial herb; O, hillsides, widespread; MH 171.

Erigeron concinnus (Hook. & Arn.) Torr. & Gray var. *condensatus* D.C. Eat. - NAVAJO FLEABANE
Perennial herb; O, widespread; SLW 22287, LMS 6895, 6913.

Erigeron divergens Torr. & Gray - SPREADING FLEABANE
Biennial herb; O, disturbed sites; MH 717, 147, JRS 5233.

Erigeron kachinensis Welsh & Moore - KACHINA FLEABANE
Perennial herb; U, seeps and hanging gardens; JRS 5014, KH 6109.

Erigeron religiosus Cronq. - CLEAR CREEK FLEABANE
Annual herb; U, sandy, moist soils in Navajo Sandstone; KH 19293, 21044.

Erigeron utahensis Gray var. *sparsifolius* (Eastwood) Cronquist - UTAH FLEABANE
Perennial herb; W, canyon bottoms, hillsides, and uplands; MH 401, 391. Stem base not densely white-pilose; involucre <8mm wide

Erigeron utahensis Gray var. *utahensis* - UTAH FLEABANE
Perennial herb; O, canyon bottoms; MH 331, 95. Stem base densely white-pilose; involucre >10mm wide

Erigeron zothecinus Welsh - LAKE POWELL FLEABANE
Perennial herb; U, hanging gardens, seeps, and springs; SLW 22115 (holotype).

Eurybia glauca (Nutt.) Nesom - GRAY ASTER
[*Aster glaucodes* Blake] Perennial herb; C, hanging gardens; MH 234, NDA 22568.

- Euthamia occidentalis* Nutt. - WESTERN GOLDETOP
[*Solidago occidentalis* (Nutt.) Torr. & Gray] Perennial herb; C, canyon bottoms, riparian; MH 289.
- Gaillardia pinnatifida* Torr. - RED DOME BLANKETFLOWER
Perennial herb; O, uplands, desert shrub; MH 393, 675, 564, GR 1784.
- Glyptopleura marginata* D.C. Eat. - CARVESEED
Annual herb; U, desert shrub, Orange Cliffs; SLW 21966.
- Gnaphalium palustre* Nutt. - WESTERN MARSH CUDWEED
Annual herb; W, sand bars, lake shores, and pond margins; MH 687,662, EN 13480.
- Grindelia fastigiata* Greene - POINTED GUMWEED
Perennial herb; U, washes, Goodhope Bay; SLW 22569.
- Grindelia nuda* Wood var. *aphanactis* (Rydb.) Nesom - CURLYTOP GUMWEED
[*Grindelia aphanactis* Rydb.] Biennial herb; U, Flint Trail, Orange Cliffs; LMS 6992.
- Gutierrezia microcephala* (DC.) Gray - THREADLEAF SNAKEWEED
[*Gutierrezia lucida* (Greene) Greene] Shrub; U, uplands, Clay Hills Crossing; NDA 23356.
- Gutierrezia sarothrae* (Pursh) Britt. & Rusby - BROOM SNAKEWEED
Shrub; W, canyon bottoms, hillsides, washes, mesas, and benches; MH 684, 345.
- Helianthus annuus* L. - COMMON SUNFLOWER
Annual herb; O, disturbed sites, widespread; MH 267.
- Helianthus anomalous* Blake - WESTERN SUNFLOWER
Annual herb; C, sandy soils, desert shrub; MH 89, 277, 588.
- Helianthus petiolaris* Nutt. - PRAIRIE SUNFLOWER
Annual herb; O, disturbed sites, Halls Creek; PC (CARE 1753).
- Heliomeris multiflora* Nutt. var. *multiflora* Nutt. - SHOWY GOLDENEYE
Perennial herb; U, plateaus, Navajo Point; MH 728.
- Heliomeris soliceps* (Barneby) Yates - F
[*Viguiera soliceps* Barneby] Annual herb; R, Tropic Shale in Kane Co.; NDA 5073.
- Hesperodoria scopulorum* (M.E. Jones) Greene - GRAND CANYON GLOWWEED
[*Haplopappus scopulorum* (M.E. Jones) Blake] Shrub; O, canyon bottoms, San Juan River; NDA 26030.

Heterotheca grandiflora Nutt. - TELEGRAPHWEED
Biennial herb; R, roadsides, Hwy 89 & Lakeshore Drive; JRS 5533.

Heterotheca villosa (Pursh) Shinner var. *minor* (Hook.) Semple - HAIRY FALSE GOLDENASTER
Perennial herb; W, widespread; MH 96, 224, JM s.n.

Hymenopappus filifolius Hook. var. *cineratus* (Rydb) Johnst. - FINELEAF HYMENOPAPPUS
Perennial herb; W, desert shrub to pinon-juniper woodlands; MH 81.

Hymenoxys cooperi (Gray) Cockerell - COOPER'S RUBBERWEED
Biennial herb; U, shadscale community, near Big Water; DF 1155.

Hymenoxys richardsonii (Hook.) Cockerell var. *richardsonii* - PINGUE RUBBERWEED
Perennial herb; C, pinon-juniper woodlands; MH 177.

Isocoma drummondii (Torr. & Gray) Greene - DRUMMOND'S GOLDENBUSH
[*Haplopappus rusbyi* (Greene) Cronq.] Shrub; O, canyon bottoms, riparian; MH 340,
NDA 23351.

Iva acerosa (Nutt.) R.C. Jackson - COPPERWEED
[*Oxytenia acerosa* Nutt.] Perennial herb; O, canyon bottoms and washes, riparian; MH
266, VM s.n. (GLCAHERB).

**Lactuca canadensis* L. - CANADA LETTUCE
Biennial herb; U, hanging gardens, riparian; MH 327, JRS 5225.

**Lactuca serriola* L. - PRICKLY LETTUCE
Biennial herb; C, canyon bottoms, disturbed sites; MH 280.

**Lactuca tatarica* (L.) C.A. Mey - BLUE LETTUCE
Perennial herb; O, wet places; SLW 22354.

Laennecia schiedeana (Less.) Nesom - PINELAND MARSHTAIL
[*Conyza schiedeana* (Less.) Cronq.] Annual herb; U, disturbed sites, Lee's Ferry; MH
407.

Layia glandulosa (Hook.) Hook. & Arn. - WHITEDAISY TIDYTIPS
Annual herb; O, sandy soils, desert shrub; MH 446.

Lygodesmia arizonica S. Tomb - ARIZONA SKELETONPLANT
[*Lygodesmia grandiflora* (Nutt.) Torr. & Gray var. *arizonica* (S. Tomb) Welsh]
Perennial herb; O, canyons, benches, and uplands, widespread; MH 134, 447.

Machaeranthera canescens (Pursh) Gray var. *glabra* Gray - HOARY TANSYASTER
[*Aster cichoriaceus* (Greene) Blake] Perennial herb; C, widespread; MH 238, 332.

Machaeranthera canescens (Pursh) Gray ssp. *glabra* (Gray) B.L. Turner var. *aristata* (Eastw.)
B.L. Turner - HOARY TANSYASTER
[*Machaeranthera canescens* (Pursh) Gray var. *aristata* (Eastw.) Turner, *Machaeranthera linearis* Greene] Perennial herb; C, canyon bottoms; MH 257, BP 80-168, SLW 11887.

Machaeranthera gracilis (Nutt.) Shinners - SLENDER GOLDENWEED
[*Haplopappus gracilis* (Nutt.) Gray] Annual herb; O, canyon bottoms, upstream from Lee's Ferry; MH 297.

Machaeranthera grindelioides (Nutt.) Shinners var. *grindelioides* (Nutt.) Shinners - RAYLESS TANSYASTER
Perennial herb; O, uplands and hillsides; MH 156, 172.

Machaeranthera pinnatifida (Hook.) Shinners ssp. *gooddngii* (A. Nels.) B.L. Turner & Hartm - GOODDING'S TANSYASTER
Perennial herb; U, rock faces and talus slopes, upstream from Lee's Ferry; MH 12.

Machaeranthera tanacetifolia (Kunth) Nees - TANSEY LEAF TANSYASTER
[*Aster tanacetifolius* Kunth] Annual herb; U, sandy and silty soils, Halls Creek and upstream from Lee's Ferry; MH 296.

Malacothrix glabrata (Gray ex D.C. Eat.) Gray - SMOOTH DESERT DANDELION
[*Malacothrix californica* DC.] Annual herb; O, sandy soils, stream banks to desert shrub; MH 105, 421.

Malacothrix sonchoides (Nutt.) Torr. & Gray - SOWTHISTLE DESERT DANDELION
Annual herb; O, canyon bottoms, Warm Creek; MH 461.

Packera multilobata (Torr. & Gray ex Gray) W.A. We - LOBELEAF GROUNDSEL
[*Senecio multilobatus* Torr. & Gray ex Gray] Perennial herb; C, uplands, desert shrub to pinon-juniper; MH 133.

Pectis angustifolia Torr. - LEMONSCENT
Annual herb; U, canyon bottom, Long Canyon; JRS 5050.

Pectis papposa Harvey & Gray - MANYBRISTLE CINCHWEED
Annual herb; U, sandy soils, desert shrub; NDA 3129.

Perityle specuicola Welsh & Neese - ALCOVE ROCKDAISY
Perennial herb; R, hanging gardens, seeps, springs, and cliff bases; NDA 23313, 23319.

Petradoria pumila (Nutt.) Greene - GRASSY ROCK GOLDENROD
[*Solidago petradoria* Blake] Perennial herb; O, mesas and hillsides, pinon-juniper woodlands; MH 625, JZ14.

Picrothamnus desertorum Nutt. - BUD SAGEBRUSH

[*Artemisia spinescens* D.C. Eat.] Shrub; U, uplands, silty, clayey, or gravelly soils; MH 468.

Platyschkuhria integrifolia (A. Gray) Rydb. var. *desertorum* (Jones) Ellison - DESERT

BASINDAISY

Perennial herb; O, uplands, saline substrate; MH 599.

Pluchea sericea (Nutt.) Coville - ARROWWEED

[*Tessaria sericea* (Nutt.) Shinners] Shrub; C, Riparian, San Juan and Colorado Rivers; SLW. 22368, 21995, NDA 3815.

Prenanthes exigua (Gray) Rydb. - BRIGHTWHITE

Perennial herb; O, hillsides, desert shrub to pinon-jupiner communities; MH 64, 584, JZ 1.

Psathyrotes pilifera Gray - HAIRYBEAST TURTLEBACK

Annual herb; U, upland, desert shrub, Lee's Ferry; MH 359, PW 1997.

**Pseudognaphalium luteoalbum* (L.) Hilliard & Burtt - JERSEY CUDWEED

[*Gnaphalium luteoalbum* L.] Annual herb; C, stream and lake margins; MH 199.

Pseudognaphalium stramineum (Kunth) W.A. Weber - COTTONBATTING PLANT

[*Gnaphalium chilense* Spreng. var. *confertifolium* Greene] Annual herb; C, stream and lake margins; MH 53.

Psilactis asteroides Gray - NEW MEXICO TANSYASTER

[*Machaeranthera asteroides* (Torr.) Greene] Perennial herb; O, uplands, desert shrub; KH 19292.

Psilostrophe sparsiflora (Gray) A. Nels. - GREENSTEM PAPERFLOWER

Perennial herb; O, uplands, desert shrub to pinon-junipers communities, widespread; MH 582.

Senecio flaccidus Less. var. *flaccidus* Less. - THREADLEAF RAGWORT

Perennial herb; U, sandy substrates, desert shrub, Wahweap Bay overlook; MH 501.

Senecio spartioides Torr. & Gray - BROOMLIKE RAGWORT

Perennial herb; O, desert shrub to pinon-juniper woodland; MH 730.lvs. simple & entire

Solidago canadensis L. var. *salebrosa* (Piper) M.E. Jones - SALEBROSA GOLDENROD

[*Solidago altissima* L.] Perennial herb; C, canyon bottoms, riparian; MH 235, 249.

Solidago velutina Dc. - THREEENERVE GOLDENROD

[*Solidago sparsiflora* Gray] Perennial herb; C, canyon bottoms and hanging gardens, riparian; JF 94, 322, 1016.

**Sonchus asper* (L.) Hill - SPINY SOWTHISTLE

Perennial herb; O, canyon bottoms, disturbed sites; MH 227, 279, 336, JF 790, 977.

Stephanomeria exigua Nutt. - SMALL WIRELETTUCE

Perennial herb; O, uplands and canyons, desert shrub to pinon-juniper woodlands; MH 87.

Stephanomeria minor (Hook.) Nutt. var. *minor*- NARROWLEAF WIRELETTUCE

[*Stephanomeria tenuifolia* (Raf.) Hall] Perennial herb; O, canyon bottoms and desert shrub uplands; JRS 5020, KH 19273.

Stephanomeria pauciflora (Torr.) A. Nels. - BROWNPLUME WIRELETTUCE

Perennial herb; O, sandy soils, beaches; MH 285.

Stephanomeria runcinata Nutt. - DESERT WIRELETTUCE

Perennial herb; U, desert shrub, Escalante River; SLW 22129.

Stylocline micropoides Gray - WOOLLYHEAD NESTSTRAW

Annual herb; U, talus slopes and benches, desert shrub; BP 82-62, GR 1796.

Symphyotrichum ascendens (Lindl.) Nesom - WESTERN ASTER

[*Aster chilensis* Nees] Perennial herb; O, canyon bottoms, riparian; GR 4248, SLW 22351.

Symphyotrichum expansum (Poepp. ex Spreng.) Nesom - SOUTHWESTERN ANNUAL

SALTMARSH ASTER

[*Aster subulatus* Michx., *Aster exilis* Ell., nomen dubium] Annual herb; O, Cow Canyon and Lee's Ferry; DH s.n. (ASC 059551), JRS 4966.

Symphyotrichum falcatum (Lindl.) Nesom - WHITE PRAIRIE ASTER

[*Aster falcatus* Lindl.] Perennial herb; O, Alcove and Bowns Canyon; JRS 5036, KH 21050.

Symphyotrichum frondosum (Nutt.) Nesom - SHORT-RAYED ALKALI ASTER

[*Aster frondosus* (Nutt.) Torr. & Gray] Annual herb; O, canyon bottoms; DG 9, NDA 26041.

Symphyotrichum lanceolatum (Willd.) Nesom ssp. *hesperium* (Gray) Nesom - WHITE

PANICLE ASTER

[*Aster hesperius* Gray] Perennial herb; U, Coyote Gulch; MH 250.

Symphyotrichum welshii (Cronq.) Nesom - WELSH'S ASTER

Perennial herb; U, riparian, Explorer Canyon; MH 320.

**Taraxacum officinale* G.H. Weber ex Wiggers - COMMON DANDELION

Perennial herb; W, disturbed sites; MH 311.

Tetradymia canescens Dc. - SPINELESS HORSEBRUSH

Shrub; O, uplands, pinon-juniper woodlands; MH 563.

Tetraneuris ivesiana- IVES' FOURNERVED DAISY

[*Hymenoxys acaulis* (Pursh) Parker var. *ivesiana* (Greene) Parker,] Perennial herb; W, uplands, pinon-juniper woodlands; MH 63, 143, 557.

Thelesperma megapotamicum (Spreng.) Kuntze - HOPI TEA GREENTHREAD

Perennial herb; U, San Juan River; MH 216.

Thelesperma subnudum Gray var. *subnudum*- NAVAJO TEA

Perennial herb; O, uplands, desert shrub; MH 587, 600.

Thymophylla acerosa (DC.) Strother - PRICKLYLEAF DOGWEED

[*Dyssodia acerosa* DC.] Perennial herb; U, hillsides, Lee's Ferry; MH 7.

Thymophylla pentachaeta (DC.) Small var. *belenidium* (DC.) Strother - FIVENEEDLE PRICKLYLEAF

[*Dyssodia pentachaeta* (DC.) B.L. Robins. var. *belenidium* (DC.) Strother, *Dyssodia thurberi* (Gray) B.L. Robins] Perennial herb; C, canyons and hillsides, desert shrub; MH 8, GR 1680, 1786.

Townsendia annua Beaman - ANNUAL TOWNSEND DAISY

Annual herb; O, hills and benches, desert shrub; MH 30, GR 1802.

Townsendia incana Nutt. - HOARY TOWNSEND DAISY

Perennial herb; W, canyon bottoms to pinon-juniper woodland; MH 151, 392, 536, NDA 22582.

**Tragopogon dubius* Scop. - YELLOW SALSIFY

Biennial herb; O, disturbed sites, canyon bottoms to pinon-juniper woodlands; MH 636, PC (CARE 1922).

Vanclevea stylosa (Eastw.) Greene - PILLAR FALSE GUMWEED

Shrub; C, sandy soils, desert shrub; MH 369, HDH 11276.

Verbesina encelioides (Cav.) Benth. & Hook. f. ex Gray - GOLDEN CROWNBEARD

Annual herb; U, canyon bottoms, San Juan River; NDA 23259.

Wyethia scabra Hook. - BADLANDS MULE-EARS

Perennial herb; O, hillsides and canyons, desert shrub; MH 106, JM s.n. (GLCAHERB).

**Xanthium strumarium* L. - ROUGH COCKLEBURR

Annual herb; O, disturbed wet sites, bottomlands; MH 347.

Xylorhiza glabriuscula Nutt. - SMOOTH WOODYASTER
Perennial herb; U, Millard Canyon; SLW 21917.

Xylorhiza tortifolia (Torr. & Gray) Greene var. *imberbis* (Cronq.) T.J. Watson - IMBERBIS
WOODYASTER
Shrub; O, uplands, desert shrub to pinon-juniper woodlands; MH 125, 166, 467.

Berberidaceae

Mahonia fremontii (Torr.) Fedde - FREMONT'S MAHONIA
Shrub; O, canyon bottoms to pinon-juniper woodland; MH 138, PC (CARE 1941).

Mahonia repens (Lindl.) G. Don - CREEPING BARBERRY
Shrub; O, streams and hanging gardens; NDA 4121, GR 4104.

Betulaceae

Betula occidentalis Hook. - WATER BIRCH
Shrub; O, canyon bottoms, riparian; MH 240.

Ostrya knowltonii Coville - KNOWLTON'S HOPHORNBEAM
Shrub; R, hanging gardens; JF 843,900.

Bignoniaceae

Chilopsis linearis (Cav.) Sweet - DESERT WILLOW
Tree; U, Cultivated landscaping, Lee's Ferry; MH 358.

Boraginaceae

Cryptantha abata I.M. Johnston - DENTNUT CRYPTANTHA
Perennial herb; O, canyon bottoms, Last Chance Creek; NDA 3747.

Cryptantha angustifolia (Torr.) Greene - PANAMINT CRYPTANTHA
Annual herb; C, desert shrub; MH 2, 706, JRS 5240.

Cryptantha barbigera (Gray) Greene - BEARDED CRYPTANTHA
Annual herb; O, Orange Cliffs; SLW 21965.

Cryptantha capitata (Eastw.) I.M. Johnston - CAPITATE CRYPTANTHA
Perennial herb; O, pinon-juniper woodlands, Happy Canyon; LMS 6847.

Cryptantha cinerea (Greene) Cronq. - JAMES' CRYPTANTHA
[*Cryptantha jamesii* (Torr.) Payson] Perennial herb; C, sandy and clayey soils, desert
shrub; MH 619.

Cryptantha circumscissa (Hook. & Arn.) I.M. Johnston - CUSHION CRYPTANTHA
Annual herb; W, desert shrub; MH 113, 483, 680, JRS 5213.

Cryptantha compacta Higgins - COMPACT CRYPTANTHA
Perennial herb; R, pinon-juniper woodlands, Cleopatras Chair; MH 631.

Cryptantha confertiflora (Greene) Payson - BASIN YELLOW CRYPTANTHA
Perennial herb; C, uplands, desert shrub; MH 79, GR 1689.

Cryptantha crassisepala (Torr. & Gray) Greene var. *elachantha* I.M. Johnston - THICKSEPAL CRYPTANTHA
Annual herb; W, desert shrub; MH 448, 452, 453, 460, 472, 546, 560, 573, JRS 5211, GR 1715.

Cryptantha fendleri (Gray) Greene - SANDDUNE CRYPTANTHA
Annual herb; O, canyon bottoms, desert shrub, Lee's Ferry; DH s.n. (ASC 53652).

Cryptantha flava (A. Nels.) Payson - BRENDAS YELLOW CRYPTANTHA
Perennial herb; C, uplands, desert shrub to pinon-juniper woodlands; MH 469, 548.

Cryptantha flavoculata (A. Nels.) Payson - ROUGHSEED CRYPTANTHA
Perennial herb; O, mesas, pinon-juniper woodlands, Big Ridge; LMS 6768.

Cryptantha fulvocanescens (S. Wats.) Payson - TAWNY CRYPTANTHA
Perennial herb; O, mesas and rim rock, pinon-juniper woodlands; MH 549.

Cryptantha gracilis Osterhout - NARROWSTEM CRYPTANTHA
Annual herb; O, pinon-jupiner woodlands; MH 651, 553.

Cryptantha holoptera (Gray) J.F. Macbr. - WINGED CRYPTANTHA
[*Cryptantha inequata* I.M. Johnston] Annual herb; U, Ticaboo Canyon; SLW 22028.

Cryptantha humilis (Gray) Payson - ROUNDSPIKE CRYPTANTHA
Perennial herb; O, desert shrub, Alstrum Point; NDA 3669.

Cryptantha micranthavar. micrantha (Torr.) I. M. Johnston - REDROOT CRYPTANTHA
Annual herb; C, hillsides and benches, desert shrub; MH 84, 454, 462, JZ 4, JRS 5212, GR 1652.

Cryptantha nevadensis A. Nels. & Kennedy - NEVADA CRYPTANTHA
Annual herb; O, hillsides, desert shrub, San Juan and John's Canyons; GR 1650, 1789.

Cryptantha osterhoutii (Payson) Payson - OSTERHOUT'S CRYPTANTHA
Perennial herb; U, desert shrub, Millard Canyon; SLW 21921.

Cryptantha pterocarya (Torr.) Greene var. *pterocarya*- WINGNUT CRYPTANTHA
Annual herb; C, canyonbottoms and bottomlands; MH 428, 449, 641, 650.

Cryptantha racemosa (S. Wats.) Greene - BUSHY CRYPTANTHA

Perennial herb; U, hillsides, desert shrub, Lee's Ferry; MH 3.

Cryptantha recurvata Coville - CURVENUT CRYPTANTHA
Annual herb; C, desert shrub; MH 26, 450, 491, GR 1649.

Cryptantha tenuis (Eastw.) Payson - CANYON CRYPTANTHA
Perennial herb; U, hanging garden, Alcove Canyon; KH 18600.

Heliotropium convolvulaceum (Nutt.) A. Gray var. *convolvulaceum* - PHLOX HELIOTROPE
Annual herb; O, sandy soil, desert shrub; MH 258.

Heliotropium curassavicum L. var. *obovatum* DC. - SEASIDE HELIOTROPE
Perennial herb; O, saline disturbed sites; MH 531, 713, NDA 23366.

Lappula occidentalis (S. Wats.) Greene var. *cupulata* (Gray) Higgins - FLATSPINE
STICKSEED
Annual herb; C, bottomlands, disturbed sites; MH 154, 168, 424, 476, JRS 5216, 5642.

Lithospermum incisum Lehm. - NARROWLEAF STONESEED
Perennial herb; O, pinon-juniper woodlands; MH 508, 646.

Pectocarya heterocarpa (I.M. Johnston) I.M. Johnston - CHUCKWALLA COMBSEED
Annual herb; U, desert shrub, San Juan Co; KH 21385.

Tiquilia latior (I.M. Johnston) A. Richards. - MATTED CRINKLEMAT
[*Coldenia hispidissima* (Torr. & Gray) Gray] Perennial herb; C, uplands, hillsides, desert
shrub; MH 213.

Brassicaceae

Arabis perennans S. Wats. - PERENNIAL ROCKCRESS
Perennial herb; O, pinon-juniper woodlands; MH 627, JRS 5652.

Arabis pulchra M.E. Jones ex S. Wats. - BEAUTIFUL ROCKCRESS
Perennial herb; U, Millard Canyon; BTW 21841.

**Brassica nigra* (L.) W.D.J. Koch - BLACK MUSTARD
Annual herb; O, disturbed sites; MH 206.

**Brassica tournefortii* Gouan - AFRICAN MUSTARD
Annual herb; C, roadsides and disturbed sites; MH 417, 708.

Caulanthus crassicaulis (Torr.) S. Wats. - THICKSTEM WILD CABBAGE
Perennial herb; U, desert shrub to pinon-juniper woodlands, Purple Hills; BTW 1458.

Descurainia incana (Bernh. ex Fisch. & C.A. Mey.) Dorn ssp. *incisa* (Engelm.) Kartesz &
Gandhi - MOUNTAIN TANSY MUSTARD

Biennial herb; O, sandy site, San Juan Canyon; GR 1668.

Descurainia pinnata (Walt.) Britt. - WESTERN TANSY MUSTARD

Annual herb; C, sandy soils, desert shrub; MH 146, 430, 471, GR 1667.

**Descurainia sophia* (L.) Webb ex Prantl - HERB SOPHIA

Annual herb; O, beaches and disturbed sites; MH 425.

Dimorphocarpa wislizeni (Engelm.) Rollins - TOURISTPLANT

[*Dithyrea wislizeni* Engelm.] Annual herb; O, sandy soils, desert shrub; MH 503, GR 1654.

Draba cuneifolia Nutt. ex Torrey & A. Gray var. *cuneifolia*- WEDGELEAF DRABA

Annual herb; O, uplands, desert shrub to pinon-juniper woodlands; MH 540, JRS 5221.

Erysimum capitatum (Dougl. ex Hook.) Greene var. *purshii* (Dur.) Rollins - PURSH'S

WALLFLOWER

Perennial herb; O, sandy soils, desert shrub; MH 470, GR 1714.

**Erysimum repandum* L. - SPREADING WALLFLOWER

Annual herb; O, disturbed sites, Clay Hills; MH 533.

Hutchinsia procumbens (L.) Desv. - PROSTRATE HUTCHINSIA

Annual herb; U, wet sites and hanging gardens, Ribbon and Escalante Garden Canyons; SLW 22125, 21725.

Lepidium alyssoides Gray var. *junceum* Rollins - MESA PEPPERWORT

Perennial herb; U, stream banks, Lee's Ferry; CG s.n. 1947(type, Gray Herbarium).

Lepidium densiflorum Schrad. var. *ramosum* (A. Nels.) Thellung - MINER'S PEPPERWEED

Annual herb; W, disturbed areas; MH 420.

Lepidium lasiocarpum Nutt. var. *lasiocarpum* Nutt. - SHAGGYFRUIT PEPPERWEED

Annual herb; C, disturbed sites; MH 127, GR 1661, JRS 5207.

**Lepidium latifolium* L. - BROADLEAVED PEPPERWEED

Perennial herb; C, Riparian, upstream from Lee's Ferry; MH 288, 304, 718.

Lepidium montanum Nutt. var. *jonesii* (Rydb.) C.L. Hitchc. - JONES' PEPPERWEED

[*Lepidium jonesii* Rydb.] Perennial herb; W, upland, hills, mesas, benches, washes, and canyons, desert shrub to pinon-juniper woodlands; MH 15, 439, 444, 543, AP 80-142, GR 1670.

Lesquerella ludoviciana (Nutt.) S. Wats. - FOOTHILL BLADDERPOD

Perennial herb; U, pinon-juniper woodlands, Purple Hills; JZ 3.

Lesquerella rectipes Woot. & Standl. - STRAIGHT BLADDERPOD
Perennial herb; W, pinon-juniper woodlands; MH 517, SLW 22228, 21989.

**Malcolmia africana* Wats.; Wats. - AFRICAN MUSTARD
Annual herb; O, disturbed sites, desert shrub; MH 187, JRS 5215.

Physaria acutifolia Rydb. - SHARPLEAF TWINPOD
Perennial herb; C, canyons and uplands, desert shrub to pinon-juniper; MH 632, JRS 4937.

Physaria chambersii Rollins - CHAMBERS' TWINPOD
Perennial herb; U, desert shrub, Last Chance Creek; NDA 3748.

Physaria newberryi Gray - NEWBERRY'S TWINPOD
Perennial herb; O, Happy Canyon; SLW 21793.

Rorippa palustris (L.) Besser ssp. *hispida* (Desvaux) Jonsel - HISPID YELLOWCRESS
[*Rorippa islandica* (Oeder) Borbás] Biennial herb; O, bottomlands, riparian; MH 702, JRS 4992.

Rorippa sinuata (Nutt.) A.S. Hitchc. - SPREADING YELLOWCRESS
Perennial herb; O, disturbed sites, Clay Hills Crossing; MH 532.

Rorippa sphaerocarpa (Gray) Britt. - ROUNDFRUIT YELLOWCRESS
Annual herb; U, disturbed sites; KH 18599.

Schoenocrambe linifolia (Nutt.) Greene - FLAXLEAF PLAINSMUSTARD
[*Sisymbrium linifolium* (Nutt.) Nutt. ex Torr. & Gray] Perennial herb; U, desert shrub, Last Chance Creek and Ribbon Canyon; SLW 21726, NDA 3514.

**Sisymbrium altissimum* L. - TALL TUMBLEMUSTARD
Annual herb; C, disturbed sites; MH 155, 569.

**Sisymbrium irio* L. - LONDON ROCKET
Annual herb; O, disturbed sites; MH 431.

Stanleya pinnata (Pursh) Britt. var. *pinnata* - DESERT PRINCESPLUME
Perennial herb; W, seleniferous soils, desert shrub to pinon-juniper woodlands; MH 108, GR 1776.

Streptanthella longirostris (S. Wats.) Rydb. - LONGBEAK STREPTANTHELLA
Annual herb; W, desert shrub to pinon-juniper woodlands; MH 422, 458, GR 1653.

Streptanthus cordatus Nutt. - HEARTLEAF TWISTFLOWER
Perennial herb; O, uplands, hills, and mesas; MH 182, 511.

Thelypodiopsis divaricata (Rollins) Welsh & Reveal - SPREADING THELYPODIOPSIS
Biennial herb; O, clayey soils, canyons and uplands; MH 607, BTW 21854, JRS 4934.

Thelypodium integrifolium (Nuttall ex Torrey & Gray) Endlicher - ENTIRELEAVED
THELYPODY
Biennial herb; O, bottomland, riparian; MH 338, NDA 23321.

Cactaceae

Echinocactus polycephalus Engelm. & Bigelow - COTTONTOP CACTUS
Succulent shrub; R, benches, Lee's Ferry; MH 612.

Echinocereus engelmannii (Parry ex Engelm.) Lem. var. *variegatus* (Engelm. & Bigelow)
Rumpl. - ENGELMANN'S HEDGEHOG CACTUS
Succulent shrub; O, rocky areas, desert shrub; MH 432, NDA 3556, BTW 1404.

Echinocereus triglochidiatus Engelm. var. *mojavensis* (Engelm. & Bigelow) L. Benson -
MOJAVE KINGCUP CACTUS
[*Echinocereus mojavensis* (Engelm. & Bigelow) Rumpl.] Succulent shrub; W, rocky
areas, desert shrub to pinon-juniper woodlands; MH 498, 556 (determined by M. Baker).

Opuntia basilaris Engelm. & Bigel. - BEAVERTAIL PRICKLYPEAR
[*Opuntia brachyclada* Griffiths] Succulent shrub; O, benches, desert shrub; SLW 21999.

Opuntia erinacea Engelm. & Bigelow ex Engelm. var. *erinacea*- GRIZZLYBEAR
PRICKLYPEAR
Succulent shrub; O, benches, desert shrub; GR 1679. Spines confined to upper half of pad

Opuntia erinacea Engelm. & Bigelow ex Engelm. var. *utahensis* (Engelm.) L. Benson - UTAH
GRIZZLYBEAR PRICKLYPEAR
Succulent shrub; C, bottomlands and canyons, Great Bend Hanging Gardens and Clay
Hills Crossing; MH 581, 711. Spines present over entire pad

Opuntia macrorhiza Engelm. - TWISTSPINE PRICKLYPEAR
Succulent shrub; O, benches, desert shrub to pinon-juniper woodlands; MH 145
(determined by M. Baker).

Opuntia nicholii L. Benson - NAVAJO BRIDGE PRICKLYPEAR
Succulent shrub; O, benches and hills, desert shrub; WH 7367.

Opuntia phaeacantha Engelm. var. *major* Engelm. - MOJAVE PRICKLYPEAR
Succulent shrub; W, benches and canyons, desert shrub to pinon-juniper; SLW 22450.

Opuntia pinkavae Parfitt - PINKAVA'S PRICKLYPEAR
Succulent shrub; U, sandy soils, desert shrub, Hole-in-the-Rock; MH 93 (determined by
M. Baker).

Opuntia polyacantha Haw. var. *polyacantha*- HAIRSPINE PRICKLYPEAR

Succulent shrub; W, desert shrub to pinon-juniper; BTW 1403. Spines not flexible or curving

Opuntia polyacantha Haw. var. *trichophora* (Engelm. & Bigelow) Coulter. - HAIRSPINE

PRICKLYPEAR

Succulent shrub; O, Three Gardens; SLW 12414. Spines flexible and curving

Opuntia whipplei Engelm. & Bigelow - WHIPPLE CHOLLA

Succulent shrub; R, desert shrub, Finger Rock; MH 721.

Pediocactus bradyi L. Benson - BRADY'S HEDGEHOG CACTUS

Succulent shrub; R, benches with Kaibab Limestone chips over Moenkopi Formation soils; GKB 891.

Sclerocactus parviflorus Clover & Jotter - SMALLFLOWER FISHHOOK CACTUS

[*Sclerocactus whipplei* (Engelm. & Bigelow) Britt. & Rose var. *roseus* (Clover) L. Benson,] Succulent shrub; O, desert shrub to pinon-juniper; MH 490, 566, GR 1677, 1794, NDA 3636.

Campanulaceae

Lobelia cardinalis L. - CARDINALFLOWER

Perennial herb; U, hanging gardens and seeps; JF 1067, SLW 11879.

Nemacladus glanduliferus Jepson var. *orientalis* McVaugh - GLANDULAR THREADPLANT

Annual herb; U, desert shrub, Lee's Ferry and just inside GLCA boundary down Hole-in-the-Rock-Road; MH 132.

Capparaceae

Cleome lutea Hook. - YELLOW SPIDERFLOWER

Annual herb; C, bottomlands and canyons, desert shrub; MH 153, GR 1723.

Cleomella palmeriana Jones - ROCKY MOUNTAIN STICKWEED

Annual herb; C, tropic shale formations; MH 365, 475.

Caprifoliaceae

Syphoricarpos longiflorus Gray - DESERT SNOWBERRY

Shrub; O, canyons and rock-outcrops; MH 181.

Caryophyllaceae

Arenaria eastwoodiae Rydb. - EASTWOOD'S SANDWORT

Perennial herb; O, mesas and hillsides, desert shrub to pinon-juniper woodland; MH 94.

Pseudostellaria jamesiana (Torr.) W.A. Weber & R.L. Hartman - TUBER STARWORT

[*Stellaria jamesiana* Torr.] Perennial herb; U, pinon-juniper woodlands, Navajo Point; BJ 2004(GLCAHERB).

Silene antirrhina L. - SLEEPY SILENE

Annual herb; O, canyons, disturbed sites; MH 140.

Spergularia salina J.& K. Presl - SALT SANDSPURRY

[*Spergularia marina* (L.) Griseb.] Annual herb; U, riparian; KH 18507.

Celastraceae

Paxistima myrsinoides (Pursh) Raf. - OREGON BOXLEAF

Shrub; U, Navajo Point; MH 726.

Chenopodiaceae

Atriplex argentea Nutt. - SILVERSCALE SALT BUSH

[*Atriplex argentea* Nutt. var. *rydbergii* (Standley) S. Welsh,] Annual herb; U, talus slope, desert shrub; KH 21410.

Atriplex canescens (Pursh) Nutt. var. *canescens* (Pursh) Nutt. - FOURWING SALT BUSH

Shrub; W, desert shrub to pinon-juniper woodlands; MH 24.

Atriplex confertifolia (Torrey & Fremont) S. Watson - SHADSCALE SALT BUSH

[*Atriplex jonesii* Standl.] Shrub; W, benches and hillsides; MH 169, 526, 574, GR 1783.

Atriplex corrugata S. Wats. - MAT SALT BUSH

Shrub; C, Tropic Shale Formation; MH 474.

Atriplex gardneri (Moq.) D. Dietr. - GARDNER'S SALT BUSH

Shrub; C, clay soils, desert shrub to pinon-juniper woodlands; MH 164, 605.

Atriplex garrettii Rydb. - GARRETT'S SALT BUSH

Shrub; U, talus slopes of canyons; MH 524, 575, NDA 23368.

Atriplex graciliflora M.E. Jones - SLENDERFLOWER SALT BUSH

Shrub; U, canyon bottoms, riparian; MH 659.

Atriplex navajoensis Hanson - NAVAJO SALT BUSH

Shrub; U, Lee's Ferry; SLW 22058, NDA 4351.

Atriplex obovata Moq. - MOUND SALT BUSH

Shrub; O, bottomlands and canyons; MH 344, GR 1683.

Atriplex saccaria S. Wats. - SACK SALT BUSH

Annual herb; O, bottomlands in saline clay soils; MH 523, 576.

**Bassia hyssopifolia* (Pallas) Kuntz - FIVEHORN SMOTHERWEED

Annual herb; O, moist disturbed sites; MH 265, 318, 679.

**Chenopodium album* L. var. *album* L. - LAMBSQUARTERS
Annual herb; O, disturbed sites; MH 679.

Chenopodium desiccatum A. Nels. - ARIDLAND GOOSEFOOT
Annual herb; U, moist disturbed sites, Great Bend Hanging Garden; MH 712.

Chenopodium fremontii S. Wats. - FREMONT'S GOOSEFOOT
Annual herb; O, disturbed sites, desert shrub to pinon-juniper woodlands; MH 660, JRS 5055.

Chenopodium incanum (S. Wats.) Heller var. *incanum*- MEALY GOOSEFOOT
Annual herb; O, disturbed sites, desert shrub to pinon-juniper woodlands; MH 188, 222, 608.

Chenopodium leptophyllum (Moq.) Nutt. ex S. Wats. - NARROWLEAF GOOSEFOOT
Annual herb; O, bottomlands, riparian; LCH 14170.

Chenopodium salinum Standl. - ROCKY MOUNTAIN GOOSEFOOT
[*Chenopodium glaucum* L. var. *salinum* (Standl.) Boivin,] Annual herb; O, canyon bottoms, riparian; MH 316.

Corispermum americanum (Nuttall) Nuttall - AMERICAN BUGSEED
[*Corispermum hyssopifolium* L. p.p.] Annual herb; O, sandy soils; MH 91, 591.

Corispermum welshii Mosyakin - WELSH'S BUGSEED
Annual herb; U, sandy soils, Halls Creek; SLW 11797.

Cycloloma atriplicifolium (Spreng.) Coul. - WINGED PIGWEED
Annual herb; U, sandy soils, desert shrub; MH 195.

Grayia spinosa (Hook.) Moq - SPINY HOPSGAGE
Shrub; O, hills, benches, and canyons, desert shrub; MH 45, GR 1718.

**Halogeton glomeratus* (Bieberstein) C.A. Meyer - SALTLOVER
Annual herb; O, disturbed sites and roadsides; MH 360.

Kochia americana Wats. - GREEN MOLLY
[*Bassia americana* (S. Watson) A.J. Watson] Perennial herb; O, canyon bottoms; MH 262.

**Kochia scoparia* (L.) Schrad. - MEXICAN-FIREWEED
[*Bassia scoparia* (L.) A.J. Scott] Annual herb; O, bottomlands, disturbed sites; MH 269.

Krascheninnikovia lanata (Pursh) A.D.J. Meeuse & Smit - WINTERFAT
[*Ceratoides lanata* (Pursh) J.T. Howell; *Eurotia lanata* (Pursh) Moq.] Shrub; O, uplands, mesas, and benches, desert shrub to pinon-juniper woodlands; MH 487.

Monolepis nuttalliana (J.A. Schultes) Greene - NUTTALL'S POVERTYWEED
Annual herb; O, bottomlands, disturbed sites; MH 534, 606.

**Salsola paulsenii* Litv. - BARBWISE RUSSIAN THISTLE
Annual herb; W, disturbed sites; MH 374.

**Salsola tragus* L. - PRICKLY RUSSIAN THISTLE
[*Salsola iberica* (Sennen & Pau) Botsch. ex Czerepanov, *Salsola australis* R. Br.] Annual
herb; W, disturbed sites; MH 580.

Suaeda moquinii (Torr.) Greene - MOJAVE SEABLITE
[*Suaeda torreyana* S. Wats.] Shrub; O, bottomlands, riparian; MH 411.

Zuckia brandegeei (Gray) Welsh & Stutz ex Welsh - SILTBUSH
[*Grayia brandegeei* Gray] Shrub; O, clayey soils, canyons; NDA 22607.

Convolvulaceae

**Convolvulus arvensis* L. - FIELD BINDWEED
Perennial herb; O, disturbed sites; MH 160.

Evolvulus nuttallianus J.A. Schultes – SHAGGY DWARF MORNING-GLORY
Perennial herb; U, sandy soils, Lee's Ferry; JZ 8.

Cornaceae

Cornus sericea L. ssp. *sericea* L. - REDOSIER DOGWOOD
Shrub; O, hanging gardens and other moist sites; JRS 5237.

Crossosomataceae

Glossopetalon spinescens Gray var. *aridum* M.E. Jones - SPINY GREASEBUSH
Shrub; O, hills, mesas and benches, desert shrub to pinon-juniper; MH 191.

Cucurbitaceae

Cucurbita palmata S. Wats. - COYOTE GOURD
Perennial herb; U, disturbed sites, Lee's Ferry; MH 613.

Cuscutaceae

Cuscuta denticulata Engelm. - DESERT DODDER
Perennial herb; U, growing on Ericameria, Blue Notch Canyon; MH 685.

Elaeagnaceae

**Elaeagnus angustifolia* L. - RUSSIAN OLIVE
Tree; O, riparian, San Juan and Escalante Rivers; MH 351, GR 1695.

Shepherdia argentea (Pursh) Nutt. - SILVER BUFFALOBERRY
Shrub; U, canyons, Last Chance Creek; NDA 3508.

Shepherdia rotundifolia Parry - ROUNDLEAF BUFFALOBERRY
Shrub; O, uplands and canyons, hillsides; MH 489.

Ericaceae

Arctostaphylos patula Greene - GREENLEAF MANZANITA
Shrub; R, canyon bottom, Dark Canyon; MH 382.

Euphorbiaceae

Chamaesyce fendleri T. & G. - FENDLER'S SANDMAT
[*Euphorbia fendleri* Torr. & Gray] Perennial herb; W, mesas, benches, and washes,
desert shrub to pinon-juniper woodlands; MH 126, 136, 264, 361, 375.

Chamaesyce glyptosperma (Engelm.) Small - RIBSEED SANDMAT
[*Euphorbia glyptosperma* Engelm.] Annual herb; O, canyon bottoms, disturbed sites; MH
699.

Chamaesyce hyssopifolia (L.) Small - HYSSOPLEAF SANDMAT
Annual herb; C, disturbed sites, Lee's Ferry; MH 398.

Chamaesyce maculata (L.) Small - SPOTTED SANDMAT
[*Euphorbia albomarginata* Torr. & Gray] Annual herb; U, disturbed sites, Lee's Ferry;
MH 408.

Chamaesyce parryi (Engelm.) Rydb. - PARRY'S SANDMAT
[*Euphorbia parryi* Engelm.] Annual herb; U, sandy soils, desert shrub; MH 122, 259.

Chamaesyce prostrata (Ait.) Small - PROSTRATE SANDMAT
Annual herb; O, disturbed sites, Lee's Ferry; MH 355.

Chamaesyce serpyllifolia (Pers.) Small - THYMELEAF SANDMAT
Annual herb; O, disturbed sites; KH 21035.

Croton texensis (Klotzsch) Muell.-Arg. var. *utahensis* Cronq. - UTAH CROTON
Annual herb; O, sandy sites, desert shrub; MH 658, AP & BP 80-148.

Euphorbia aaron-rossii A & N Holmgren - MARBLE CANYON SPURGE
Perennial herb; R, canyon bottoms, Colorado River Canyon below Glen Canyon Dam;
MH 9,JZ 13.

Euphorbia brachycera Engelm. - HORNED SPURGE
[*Euphorbia robusta* (Engelm.) Small ex. Britt. & Br.] Perennial herb; O, canyon bottoms,
Steer Gulch; NDA 22010.

Euphorbia nephradenia Barneby - PARIA SPURGE
Annual herb; U, Halls Creek; PC (CARE 2163).

Reverchonia arenaria Gray - SAND REVERCHONIA
Annual herb; U, sandy soils, E. of Big Water; NDA 2920.

Fabaceae

Astragalus amphioxys Gray var. *modestus* Barneby - CRESCENT MILKVETCH
Perennial herb; C, canyon bottoms and benches; MH 496, 527, 590, GR 1655.banner <16 mm long

Astragalus amphioxys Gray var. *vespertinus* (Sheldon) M.E. Jones - ALADDIN'S SLIPPERS
Perennial herb; C, canyon bottoms and benches; GR 1719.banner >19 mm long

Astragalus calycosus Torr. ex S. Wats. var. *calycosus*- TORREY'S MILKVETCH
Perennial herb; U, hillsides and mesas; MH 518.

Astragalus ceramicus Sheldon var. *ceramicus* Shelton - PAINTED MILKVETCH
Perennial herb; C, sandy soils, desert shrub to pinon-juniper woodlands; MH 186, 555, 672.

Astragalus coltonii M.E. Jones - COLTON'S MILKVETCH
Perennial herb; O, desert shrub; NDA 540.

Astragalus desperatus M.E. Jones var. *desperatus* Jones - RIMROCK MILKVETCH
Perennial herb; W, desert shrub to pinon-juniper woodlands; MH 36, 72, 98, 633.

Astragalus eastwoodiae M.E. Jones - EASTWOOD'S MILKVETCH
Perennial herb; O, hillsides and mesas, Flint Trail; SLW 9664.

Astragalus fucatus Barneby - HOPI MILKVETCH
Perennial herb; O, sandy soils, desert shrub; NDA 21928.

Astragalus harrisonii Barneby - HARRISON'S MILKVETCH
Perennial herb; R, talus slope, Purple Hills; JZ 3.

Astragalus kentrophyta Gray - SPINY MILKVETCH
Perennial herb; U, sandy soils, canyons; SLW 22149.

Astragalus lentiginosus Dougl. ex Hook. var. *palans* (M.E. Jones) M.E. Jones - FRECKLED MILKVETCH
[*Astragalus bryantii* Barneby] Perennial herb; O, canyons, hillside; KH 18488, GR 1787.racemes in fruit >8cm long

Astragalus lonchocarpus Torr. - RUSHY MILKVETCH
Perennial herb; O, Happy Canyon; LMS 6844.

Astragalus malacoides Barneby - KAIPAROWITS MILKVETCH
Perennial herb; U, canyon bottoms; SLW 22279.

Astragalus moencoppensis M.E. Jones - MOENKOPI MILKVETCH
Perennial herb; U, clayey soils on benches, desert shrub; MH 167, 604.

Astragalus mollissimus Torr. var. *thompsoniae* (S. Wats.) Barneby - WOOLLY LOCOWEED
[*Astragalus thompsoniae* S. Wats.] Perennial herb; C, uplands, canyons, desert shrub to pinon-juniper woodlands; MH 71, 414, 505, GR 1791.

Astragalus monumentalis Barneby var. *cottamii* (Welsh) Isely - COTTAM'S MILKVETCH
[*Astragalus cottamii* Welsh] Perennial herb; U, slickrock, Muley Point and Slickhorn Canyon; MH 510, NDA 22588.

Astragalus musiniensis M.E. Jones - FERRON'S MILKVETCH
Perennial herb; U, hillsides and talus slopes; SLW 21938.

Astragalus newberryi Gray var. *newberryi*- NEWBERRY'S MILKVETCH
Perennial herb; O, desert shrub, Last Chance Canyon; NDA 23484.

Astragalus nidularis Barneby - BIRDNEST MILKVETCH
Perennial herb; U, desert shrub, Middle Moody Canyon; SLW 22265.

Astragalus nuttallianus DC. var. *micranthiformis* Barneby - TURKEYPEAS
Annual herb; O, benches and mesas, desert shrub; MH 23, 61.

Astragalus oophorus S. Wats. - EGG MILKVETCH
Perennial herb; O, pinon-juniper woodlands; SLW 27443.

Astragalus pardalinus (Rydb.) Barneby - PANTHER MILKVETCH
Perennial herb; O, hillside and mesas, Flint Trail; SLW 9659.

Astragalus praelongus Sheldon var. *lonchopodus* Barneby - STINKING MILKVETCH
Perennial herb; O, fine-textured substrates, desert shrub; MH 609, GR 1779.stipe 4-8mm long; San Juan Co.

Astragalus praelongus Sheldon var. *praelongus*- STINKING MILKVETCH
Perennial herb; O, clayey soils, desert shrub; SLW 22046.stipe <3mm long; Kane or Garfield Cos.

Astragalus preussii Gray var. *cutleri* Barneby - CUTLER'S MILKVETCH
[*Astragalus cutleri* (Barneby) S. Welsh] Perennial herb; R, desert shrub, Clay Hills Crossing; NDA 22013. Flwrs white

Astragalus preussii Gray var. *preussii*- PREUSS' MILKVETCH

Perennial herb; O, clayey soils, desert shrub; MH 478, LCH 8323, NDA 4546. Flwrs purple

Astragalus sabulonum Gray - GRAVEL MILKVETCH
Annual herb; O, hillsides and benches; MH 527, GR 1682.

Astragalus sesquiflorus S. Wats. - SANDSTONE MILKVETCH
Perennial herb; U, pinon-juniper woodlands, Kaiparowits Plateau; JRS 5654.

Astragalus wingatanus S. Wats. - FORT WINGATE MILKVETCH
Perennial herb; U, hillsides and mesas, Flint Trail; LMS 6799.

Astragalus zionis M.E. Jones - ZION MILKVETCH
Perennial herb; U, canyon bottoms, Bowns Canyon; SLW 21757.

Caesalpinia repens Eastw. - CREEPING NICKER
Perennial herb; U, sandy soils; PC (CARE 2257).

Caragana arborescens Lam. - SIBERIAN PEASHRUB
Tree; O, C landscaping, Wahweap Campground; NDA 3435.

Dalea candida Michx. ex Willd. var. *oligophylla* (Torr.) Shinners - WHITE PRAIRIE CLOVER
[*Dalea oligophylla* (Torr.) Shinners, *Petalostemum candidus* Michx. var. *oligophyllus* (Torr.) F.J. Herm.] Perennial herb; O, hillsides and canyon bottoms; MH 315.

Dalea flavescens (S. Wats.) Welsh - CANYONLANDS PRAIRIE CLOVER
[*Petalostemon flavescens* and *Dalea epica* (S. Wats.) Welsh var. *epica* (Welsh) Chatterley, *Petalostemon flavescens* S. Wats.] Perennial herb; U, hillsides, desert shrub; MH 107, 194, NDA 22609.

Dalea searlsiae (Gray) Barneby - SEARLS' PRAIRIE CLOVER
Perennial herb; U, canyon bottoms, Escalante arm; GR 4219.

Glycyrrhiza lepidota Pursh - AMERICAN LICORICE
Perennial herb; O, riparian; MH 74.

Hedysarum boreale Nutt. - BOREAL SWEETVETCH
Perennial herb; U, canyon bottoms, Middle Moody Canyon; SLW 22288.

Lathyrus eucosmus Butters & St. John - BUSH VETCHLING
Perennial herb; U, washes, Lower San Juan Canyon; GR 1666.

Lupinus argenteus Pursh - SILVERY LUPINE
Perennial herb; O, pinon-juniper woodlands; MH 622.

Lupinus pusillus Pursh var. *pusillus* - RUSTY LUPINE

Annual herb; C, sandy soils, desert shrub; MH 119, 459. Calyx tube strigose

Lupinus pusillus Pursh ssp. *rubens* (Rydb.) D. Dunn - RUSTY LUPINE

[*Lupinus rubens* Rydb.] Annual herb; U, sandy soils, Dry Rock Creek; SLW & NDA 11627. Calyx tube glabrous

**Medicago lupulina* L. - BLACK MEDICK

Perennial herb; U, riparian, Explorer Canyon; MH 337.

**Medicago sativa* L. - ALFALFA

Perennial herb; O, riparian, Coyote Gulch; MH 242.

**Melilotus alba* Medikus - WHITE SWEETCLOVER

Perennial herb; C, disturbed sites; AP 80-161.

**Melilotus officinalis* (L.) Lam. - YELLOW SWEETCLOVER

Perennial herb; C, disturbed sites; MH 272.

Parryella filifolia Torr. & Gray ex Gray - COMMON DUNEBROOM

Shrub; C, sandy sites, San Juan River; NDA 22549 & 23335.

Pediomelum megalanthum (Woot. & Standl.) Rydb. var. *megalanthum* - INTERMOUNTAIN INDIAN BREADROOT

Perennial herb; O, pinon-juniper woodlands, Muley Point; MH 538.

Peteria thompsoniae S. Wats. - THOMPSON'S PETERIA

Perennial herb; U, washes, Warm Creek; NDA & RA 2856.

Psoralidium junceum (Eastw.) Rydb. - RUSH LEMONWEED

Perennial herb; O, sandy soils, desert shrub; MH 619, JZ 9, NDA 22611.

Psoralidium lanceolatum (Pursh) Rydb. - LEMON SCURFPEA

Perennial herb; O, sandy soils, desert shrub to pinon-juniper woodlands; MH 144.

Psorothamnus arborescens (Torr. ex Gray) Barneby - MOJAVE INDIGOBUSH

[*Dalea amoena* S. Wats.] Shrub; U, desert shrub, Kane Co.; MH 593.

Psorothamnus fremontii var. *fremontii* (Torr.) Barneby - FREMONT'S DALEA

[*Dalea fremontii* Torr. ex Gray] Shrub; O, benches, hillsides, and canyons, desert shrub; MH 83, JRS 4946.

Psorothamnus thompsoniae var. *thompsoniae* - THOMPSON'S DALEA

Shrub; O, sandy soils, desert shrub; MH 193. Calyx tube glabrous.

Psorothamnus thompsoniae (Vail) Welsh & Atwood var. *whitingii* (Kearney & Peebles) Barneby - WHITING'S DALEA

[*Dalea whitingii* Kearney & Peebles] Shrub; U, bottomlands, desert shrub, Clay Hills Crossing; MH 577. Calyx tube villous.

Sophora stenophylla Gray - FRINGELEAF NECKLACEPOD
Perennial herb; U, sandy sites, canyonbottoms, and benches; SLW 1695.

**Trifolium fragiferum* L. - STRAWBERRY CLOVER
Perennial herb; U, riparian, Escalante River; MH 268.

Fagaceae

Quercus gambelii Nutt. - GAMBEL OAK
Tree; C, canyons and higher mountain slopes; JF 227, 925, 1080.

Quercus havardii Rydb. var. *tuckeri* Welsh - HAVARD OAK
[*Quercus welshii* R.A. Denham nom. nov., *Quercus undulata* aut. not Torr.] Shrub; C, sandy soils, desert shrub to pinon-juniper woodlands; NDA 20797.

Quercus turbinella Greene - SONORAN SCRUB OAK
Shrub; U, canyonbottoms, riparian; MH 438.

Quercus pauciloba Rydb. (*pro sp.*) [*gambelii* _ *turbanella*]-
Shrub; O, hanging gardens and mesas, Alcove Canyon and Muley Point; MH 545, KH 18500.

Fumariaceae

Corydalis aurea Willd. - SCRAMBLED EGGS
Annual herb; U, riparian, Castle Canyon; GR 1724.

Gentianaceae

Centaurium arizonicum (Gray) Heller - ARIZONA CENTAURY
[*Centaurium calycosum* (Buckl.) Fern.] Annual herb; U, riparian, Lee's Ferry; RKG 3965.

Centaurium exaltatum (Griseb.) W. Wight ex Piper - DESERT CENTAURY
Annual herb; O, riparian; MH 73, 293, 312, NDA 23325.

Frasera albomarginata S. Wats. - DESERT FRASERA
Perennial herb; O, uplands, Grand Bench; GR 4244, NDA 2728.

Frasera paniculata Torrey - TUFED FRASERA
[*Swertia utahensis* (M.E. Jones) St. John] Perennial herb; O, sandy soils, desert shrub to pinon-juniper; MH 565, 678.

Geraniaceae

**Erodium cicutarium* (L.) L'Hér. ex Ait. - REDSTEM STORK'S BILL
Annual herb; W, disturbed sites, desert shrub to pinon-juniper; SLW 21747.

Erodium texanum Gray - TEXAS STORK'S BILL
Annual herb; O, desert shrub, Lee's Ferry; JRS 5206.

Grossulariaceae

Ribes leptanthum Gray - TRUMPET GOOSEBERRY
Shrub; O, pinon-juniper woodlands, Kaiparowits Plateau; MH 733.

Hydrangeaceae

Fendlera rupicola Gray - CLIFF FENDLERBUSH
Shrub; U, canyonbottom, Dark Canyon; MH 388.

Hydrophyllaceae

Nama hispidum Gray - BRISTLY NAMA
Annual herb; U, sandy shores and drainage bottoms, Llewellyn Canyon; SLW 21743.

Nama retrorsum J.T. Howell - BETATAKIN FIDDLELEAF
Annual herb; U, sandy soils, desert shrub; MH 507, NDA 2694.

Phacelia crenulata Torr. ex S. Wats. var. *angustifolia* Atwood - CLEFTLEAF PHACELIA
Annual herb; C, salt desert shrub; MH 28, 544. Lvs. Linear.

Phacelia crenulata Torr. ex S. Wats. var. *corrugata* (A. Nels.) Brand - CLEFTLEAF
WILDHEIOTROPE
[*Phacelia corrugata* A. Nels.] Annual herb; C, desert shrub to pinon-juniper woodlands;
MH 17, 520. Lvs. not linear.

Phacelia demissa Gray var. *demissa* - INTERMOUNTAIN PHACELIA
Annual herb; C, moist clayey soils, desert shrub to pinon-juniper woodlands; MH 32,
JRS 5218.

Phacelia howelliana D. Atwood - HARLEQUIN PHACELIA
Annual herb; U, Ribbon Canyon; SLW & NDA 11702.

Phacelia incana Brand - HOARY PHACELIA
Annual herb; U, pinon-juniper woodlands, Cedar Mesa; MH 539.

Phacelia indecora J.T. Howell - DRAB PHACELIA
Annual herb; R, hanging gardens and alkaline soils, San Juan River; NDA 22560.

Phacelia integrifolia Torr. - GYPSUM PHACELIA
Annual herb; C, blackbrush communities; MH 502, 664.

Phacelia ivesiana Torr. - IVES' PHACELIA
Annual herb; C, sandy soils, desert shrub; MH 62, 423, JRS 5214.

Phacelia mammillarensis Atwood - NIPPLE BEACH PHACELIA
Annual herb; O, desert shrub, Kane Co; SLW & NDA 9809 (holotype), 11582.

Phacelia pulchella Gray var. *sabulonum* J.T. Howell - BEAUTIFUL PHACELIA
Annual herb; U, Tropic Shale, Kane Co.; AC 10012, NDA 2836, 2897.

Phacelia rafaelensis D. Atwood - PLATEAU PHACELIA
Biennial herb; U, desert shrub, Navajo Bridge vicinity; NDA & LCH 3814.

Phacelia rotundifolia Torr. ex S. Wats. - ROUNDLEAF PHACELIA
Annual herb; O, canyons, desert shrub; NDA 24650.

Lamiaceae

Hedeoma drummondii Benth. - DRUMMOND'S FALSE PENNYROYAL
Perennial herb; O, canyonbottoms; MH 381.

Hedeoma nana (Torr.) Briq. ssp. *nana* - DWARF FALSE PENNYROYAL
Perennial herb; O, hanging gardens; MH 69.

Lycopus americanus Muhl. ex W. Bart. - AMERICAN WATER HOREHOUND
Perennial herb; U, riparian, Colorado River -6.5 mile marsh; LES s.n. (GLCAHERB),
JRS 4979.

**Marrubium vulgare* L. - HOREHOUND
Perennial herb; U, disturbed sites; MH 148.

Mentha arvensis L. - WILD MINT
Perennial herb; O, riparian, stream banks; MH 292.

Poliomintha incana (Torr.) Gray - FROSTED MINT
Shrub; O, sandy soils, desert shrub; MH 616, JZ 6.

Linaceae

Linum aristatum Engelm. - BRISTLE FLAX
Annual herb; O, sandy soils; MH 547, 589.

Linum austrole Heller - SOUTHERN FLAX
Annual herb; U, canyon bottoms, Ribbon Canyon; MH 68.

Linum kingii- KING'S FLAX
Perennial herb; U, canyon bottoms, Dark Canyon; EHA s.n. (ASC 62815).

Linum perenne L. - BLUE FLAX
[*Linum perenne* L. var. *lewisii* (Pursh) Eat. & J. Wright,] Perennial herb; U, disturbed
sites, pinon-juniper woodlands, Kaiparowits Plateau; MH 731.

Linum puberulum (Engelm.) Heller - PLAINS FLAX
Annual herb; U, hillsides, John's Canyon; GR 1804.

Linum subteres (Trel.) Winkl. - SPRUCEMONT FLAX
Perennial herb; U, sandy soils, Muley Point; SLW 22238.

Loasaceae

Mentzelia albicaulis (Dougl. ex Hook.) Dougl. ex To - WHITESTEM BLAZINGSTAR
Annual herb; W, hills, benches, mesas, and canyons; MH 77, 620, JRS 5220, 5208.

Mentzelia marginata (Osterhout) Thompson & Prigge - COLORADO BLAZINGSTAR
[*Mentzelia cronequistii* H.J. Thompson & Prigge] Perennial herb; C, uplands and disturbed sites; MH 174, 373, BTW 1511.

Mentzelia multiflora (Nutt.) Gray - ADONIS BLAZINGSTAR
Perennial herb; O, hillsides, benches, and washes, desert shrub; GR 1785.

Mentzelia pterosperma Eastw. - WINGSEED BLAZINGSTAR
Perennial herb; O, hills, mesas, benches, and canyon bottoms, desert shrub; SLW 22591.

Mentzelia pumila Nutt. ex Torr. & Gray var. *lagarosa* Thorne - DWARF MENTZELIA
Biennial herb; U, canyonbottom, Colorado River -14L; AP 80-162.

Malvaceae

Sphaeralcea ambigua Gray - DESERT GLOBEMALLOW
Perennial herb; O, desert shrub, Lee's Ferry; MH 14.

Sphaeralcea coccinea (Nutt.) Rydb. - SCARLET GLOBEMALLOW
Perennial herb; W, hills, mesas, benches, and canyons; MH 603, 623.

Sphaeralcea grossulariifolia (Hooker & Arn.) Rydb. - GOOSEBERRYLEAF
GLOBEMALLOW
Perennial herb; W, hillsides, benches, and mesas, desert shrub; MH 85, 674, GR 1790.

Sphaeralcea leptophylla (Gray) Rydb. - SCALY GLOBEMALLOW
Perennial herb; O, hillsides and canyons, desert shrub; MH 229, 464, 585.

Sphaeralcea parvifolia A. Nels. - SMALLFLOWER GLOBEMALLOW
Perennial herb; W, hills, mesas, benches, and canyons; SLW 22193.

Molluginaceae

**Mollugo cerviana* (L.) Ser. - THREADSTEM CARPETWEED
Annual herb; U, sandy soils, desert shrub; NDA 10684.

Nyctaginaceae

Abronia fragrans Nutt. ex Hook. - SNOWBALL SAND VERBENA

[*Abronia elliptica* A. Nels.] Perennial herb; W, washes, canyon bottoms, and hillsides; MH 102, 384, GR 1648.

Abronia nana S. Wats. - DWARF SAND VERBENA

Perennial herb; U, benches, desert shrub; NDA 3750.

Allionia incarnata L. - TRAILING WINDMILLS

Perennial herb; O, washes and canyon bottoms, desert shrub; MH 394.

Boerhavia coccinea P. Mill. - SCARLET SPIDERLING

Perennial herb; U, canyon bottoms, Lee's Ferry; MH 397.

Mirabilis alipes (S. Wats.) Pilz - WINGED FOUR O'CLOCK

Perennial herb; O, clayey soils, desert shrub; MH 29.

Mirabilis linearis (Pursh) Heimerl - NARROWLEAF FOUR O'CLOCK

[*Oxybaphus linearis* (Pursh) B.L. Robins.] Perennial herb; C, benches and canyon bottoms, desert shrub; MH 29, 385.

Mirabilis multiflora (Torr.) Gray - COLORADO FOUR O'CLOCK

Perennial herb; C, mesas, washes, and canyon bottoms; MH 561.

Tripterocalyx carnea (Greene) L.A. Gal. var. *wootonii* (Standl.) L.A. Gal. - WOOTON'S SANDPUFFS

[*Tripterocalyx wootonii* Standl.] Annual herb; O, benches, desert shrub; NDA 3967, BFH 121005.

Tripterocalyx micranthus (Torr.) Hook. - SMALLFLOWER SANDVERBENA

[*Tripterocalyx pedunculatus* (M.E. Jones) Standl.] Annual herb; O, sandy soils, desert shrub to pinon-juniper woodland; MH 624.

Oleaceae

Forestiera pubescens Nutt. - STRETCHBERRY

[*Forestiera neomexicana* Gray] Shrub; O, riparian and hanging gardens; MH 152, GR 1694, JF 246.

Fraxinus anomala Torr. ex S. Wats. - SINGLELEAF ASH

Tree; W, hills, mesas, benches, washes, and canyon bottoms; MH 162, JF 431.

**Fraxinus velutina* Torr. - VELVET ASH

Tree; U, dry wash, Clay Hills Crossing; MH 586.

Onagraceae

Calylophus lavandulifolius (Torr. & Gray) Raven - LAVENDERLEAF SUNDROPS

Perennial herb; O, benches and hillsides, pinon-juniper woodlands; MH 512.

Camissonia atwoodii Cronq. - ATWOOD'S EVENING-PRIMROSE
Annual herb; U, Tropic Shale in salt desert shrub; NDA 5957.

Camissonia boothii (Dougl. ex Lehm.) Raven - BOOTH'S EVENING-PRIMROSE
Annual herb; U, desert shrub, Warm Creek; JM s.n. (GLCAHERB).

Camissonia brevipes (Gray) Raven - YELLOW CUPS
Annual herb; U, benches, desert shrub, Kane Co.; NDA 17449, KH 18546.

Camissonia eastwoodiae (Munz) P.H. Raven - GRAND JUNCTION CAMISSONIA
Annual herb; C, Tropic Shale, Kane Co.; MH 442, JRS 5219.

Camissonia multijuga (S. Wats.) Raven - FROSTSTEM SUNCUP
Annual herb; O, desert shrub, Kane Co.; NDA 3741, SLW 22052.

Camissonia parvula (Nutt. ex Torr. & Gray) Raven - LEWIS RIVER SUNCUP
Annual herb; U, pinon-juniper woodlands, Kaiparowits Plateau; JRS 5643.

Camissonia scapoidea (Nutt. ex Torr. & Gray) Raven - PAIUTE SUNCUP
Annual herb; U, sandy soils, Lee's Ferry; JZ 10.

Camissonia walkeri (A. Nels.) Raven - WALKER'S SUNCUP
Annual herb; C, hillsides, desert shrub to pinon-juniper woodlands; MH 34, 221, 317, 528, 705, GR 1681, 1798.

Epilobium ciliatum Raf. - FRINGED WILLOWHERB
Perennial herb; O, riparian; MH 212, 255, DG 8, JRS 5236.

Epilobium hornemannii Reichenb. - HORNEMANN'S WILLOWHERB
Perennial herb; U, riparian, Chopslot Canyon; DG 7.

Gaura coccinea Nutt. ex Pursh - SCARLET BEEBLOSSOM
Perennial herb; U, canyon bottoms and hillside, San Juan River; MH 215.

Gaura mollis James - VELVETWEED
[*Gaura parviflora* Dougl. ex Lehm.] Annual herb; U, riparian and disturbed sites; MH 295.

Gayophytum ramosissimum Torr. & Gray - PINYON GROUNDSMOKE
Annual herb; U, pinon-juniper woodlands, Kaiparowits Platuea; JRS 5643.

Oenothera albicaulis Pursh - WHITEST EVENING-PRIMROSE
Annual herb; O, sandy soils, desert shrub; WW 93.

Oenothera caespitosa Nutt. ssp. *macroglossa* (Rydb.) W.L. Wagner - TUFTED EVENING-PRIMROSE
Perennial herb; O, canyon bottoms, Gooseneck Bend; KH 18520. Hypanthium 7-14.5cm long; petals 3-6cm long

Oenothera caespitosa Nutt. ssp. *navajoensis* W.L. Wagner, Stockh, W.M. Klein - NAVAJO EVENING-PRIMROSE
Perennial herb; W, hills, mesas, benches; MH 163. Hypanthium 3-8cm long; petals 2-4cm long

Oenothera elata Kunth - HOOKER'S EVENING-PRIMROSE
[*Oenothera hookeri* Torr. & Gray] Biennial herb; U, riparian, Lee's Ferry; TH s.n. (ASC 35476).

Oenothera longissima Rydb. - LONGSTEM EVENING-PRIMROSE
Biennial herb; O, riparian and dry washes; MH 233, 310, 601.

Oenothera pallida Lindl. ssp. *pallida* Lindl. - PALE EVENING-PRIMROSE
Perennial herb; W, benches, hillsides, mesas, and canyons; MH 85, 300, 426, GR 1657, 1781.

Orobanchaceae

Orobanche cooperi (Gray) Heller - DESERT BROOMRAPE
[*Orobanche ludoviciana* Nutt. var. *cooperi* (Gray) G. Beck,] Annual herb; O, sand soils, desert shrub; MH 592, SLW 11931.

Orobanche fasciculata Nutt. - CLUSTERED BROOMRAPE
Annual herb; O, hillsides, mesas, and benches, Orange Cliffs and Rock Creek; MH 645.

Oxalidaceae

**Oxalis corniculata* L. - CREEPING WOODSORREL
Perennial herb; O, weed in lawn, Wahweap Marina; MH 666.

Papaveraceae

Argemone corymbosa Greene var. *arenicola* (G.B. Ownbey) Shinners - MOJAVE PRICKLYPOPPY
Annual herb; U, sandy soil, Lone Rock; MH 473, 657.

Plantaginaceae

**Plantago lanceolata* L. - NARROWLEAF PLANTAIN
Perennial herb; O, disturbed sites, riparian; MH 281.

**Plantago major* L. - COMMON PLANTAIN
Perennial herb; O, disturbed sites, riparian; MH 210.

Plantago patagonica Jacq. - WOOLLY PLANTAIN

[*Plantago purshii* Roemer & J.A. Schultes] Annual herb; C, hills, mesas, and benches, desert shrub to pinon-juniper woodlands; MH 78, GR 1716.

Polemoniaceae

Eriastrum diffusum (Gray) Mason - MINIATURE WOOLLYSTAR
Annual herb; U, canyon bottoms; MH 10.

Gilia flavocincta A. Nels. - LESSER YELLOWTHROAT GILIA
Annual herb; U, Two-Mile Canyon; JRS 4936.

Gilia hutchinsifolia Rydb. - DESERT PALE GILIA
Annual herb; U, hillsides, Orange Cliffs Road; SLW 21948.

Gilia inconspicua (Sm.) Sweet (Greene) V. Grub. - SHY GILIA
[*Gilia clokeyi* Mason] Annual herb; W, hills, benches, and washes; MH 44, 82, KH 21388, GR 1777.

Gilia latifolia S. Wats. - BROADLEAF GILIA
Annual herb; U, clayey soils, desert shrub; KC s.n. (GLCAHERB), SLW 22507.

Gilia leptomeria Gray - SAND GILIA
Annual herb; W, canyon bottoms, hillsides, uplands, and mesas, desert shrub to pinon-juniper; MH 488, 521, 629, 649, GR 1800.

Gilia sinuata Dougl. ex Benth. - ROSY GILIA
[*Gilia inconspicua* (Sm.) Sweet var. *sinuata* (Dougl. ex Benth.) Gray,] Annual herb; W, canyon bottoms, hillsides, uplands, and mesas, desert shrub to pinon-juniper woodlands; MH 527, 554, 648, JRS 5217, 5658.

Gilia subnuda Torr. ex Gray - CORAL GILIA
Biennial herb; W, canyon bottoms and uplands, desert shrub to pinon-juniper; MH 377, 378, 652.

Ipomopsis aggregata (Pursh) V. Grant - SCARLET GILIA
[*Gilia aggregata* (Pursh) Spreg.] Biennial herb; C, canyon bottoms and hanging gardens; MH 256, JF 1039.

Ipomopsis arizonica (Greene) Wherry - ARIZONA IPOMOPSIS
Biennial herb; U, Happy Canyon; LMS 6852.

Ipomopsis congesta (Hook.) V. Grant - BALLHEAD IPOMOPSIS
[*Gilia congesta* Hook.] Perennial herb; O, Steven's Canyon; SLW 22297.

Ipomopsis gunnisonii (Torr. & Gray) V. Grant - SANDDUNE IPOMOPSIS
[*Gilia gunnisonii* Torr. & Gray] Annual herb; C, bottomlands, desert shrub; MH 51, 481, JZ 7, GR 1656.

Ipomopsis longiflora (Torr.) V. Grant ssp. *longiflora* (Torr.) V. Grant - FLAXFLOWERED IPOMOPSIS
[*Gilia longiflora* (Torr.) G. Don] Annual herb; U, canyon bottom, San Juan River; NDA 22492.

Ipomopsis polycladon (Torr.) V. Grant - MANYBRANCHED IPOMOPSIS
[*Gilia polycladon* Torr.] Annual herb; C, washes, mesas, canyons, and hillsides, desert shrub; MH 11, 522, GR 1722, 1797, JRS 52221.

Ipomopsis pumila (Nutt.) V. Grant - DWARF IPOMOPSIS
Annual herb; O, sandy soils, desert shrub; MH 504.

Ipomopsis roseata (Rydb.) V. Grant - ROSY IPOMOPSIS
[*Gilia roseata* Rydb.] Perennial herb; O, mesas, pinon-juniper woodlands; MH 537.

Langloisia setosissima (Torr. & Gray ex Torr.) Greene - GREAT BASIN LANGLOISIA
Annual herb; O, benches, desert shrub, Kane Co.; NDA 5072, 24566.

Leptodactylon pungens (Torr.) Torr. ex Nutt. - GRANITE PRICKLY PHLOX
Perennial herb; O, canyons and uplands; MH 621, PC (CARE 2789).

Phlox austromontana Coville - MOUNTAIN PHLOX
[*Phlox austromontana* Coville var. *lutescens* Welsh,] Perennial herb; O, canyons, hills, and benches; MH 183.

Phlox gracilis (Hook.) Greene - SLENDER PHLOX
Annual herb; U, Kaiparowits Plateau; JRS 5646.

Phlox hoodii Richards. ssp. *canescens* (Torr. & Gray) Wherry - CARPET PHLOX
Perennial herb; U, pinon-juniper woodlands; MH 176.

Polygalaceae

Polygala acanthoclada Gray - DESERT POLYGALA
Shrub; O, bottomlands and mesas, desert shrub to pinon-juniper woodlands; MH 525, NDA 22604.

Polygala subspinosa S. Wats. - SPINY MILKWORT
Perennial herb; U, hillsides, pinon-juniper woodlands, Middle Moody Canyon; MH 611.

Polygonaceae

Chorizanthe brevicornu Torr. - BRITTLE SPINEFLOWER
Annual herb; O, rocky hillsides, desert shrub; MH 615, GR 1659.

Eriogonum alatum Torr. - WINGED BUCKWHEAT
Perennial herb; O, uplands and hills, desert shrub to pinon-juniper woodland; MH 197.

Eriogonum bicolor Jones - PRETTY BUCKWHEAT

Perennial herb; U, hillsides, pinon-juniper woodlands; MH 178.

Eriogonum cernuum Nutt. var. *cernuum*- NODDING BUCKWHEAT

Annual herb; O, bottomlands and mesas, desert shrub; MH 567, BP 80-171.

Eriogonum corymbosum Bentham var. *aureum* (M.E. Jones) Reveal - CRISPLEAF

BUCKWHEAT

Shrub; O, washes and hillsides, desert shrub; MH 410. flwrs yellow.

Eriogonum corymbosum Bentham var. *corymbosum* - CRISPLEAF BUCKWHEAT

[*Eriogonum corymbosum* Benth. var. *divaricatum* Torr. & Gray,] Shrub; C, canyons, washes, hillsides, and benches; MH 409. Flwrs white; leaf blade longer than broad.

Eriogonum corymbosum Benth. var. *orbiculatum* (S. Stokes) Reveal & Brotherson -

CRISPLEAF BUCKWHEAT

Shrub; O, canyon bottoms and beaches, desert shrub; HDH 11275, NJW 1978 (* verified by J. Reveal). Flwrs white; leaf blade as long as broad.

Eriogonum deflexum Torrey in Ives var. *deflexum* Torr. in Ives - FLATCROWN BUCKWHEAT

Annual herb; C, canyon bottoms, desert shrub; MH 263.

Eriogonum inflatum Torr. & Frém. - DESERT TRUMPET

Annual herb; C, canyon bottoms, hillsides, and benches, desert shrub; MH 4, 301, GR 1664.

Eriogonum leptocladon Torr. & Gray var. *papiliunculi* Reveal- SAND BUCKWHEAT

Shrub; O, sandy soils, desert shrub; MH 276.

Eriogonum leptophyllum (Torr. & Gray) Woot. & Standl. - SLENDERLEAF BUCKWHEAT

Shrub; U, desert shrub, San Juan Co.; SLW 22415.

Eriogonum microthecum Nutt. var. *simpsonii* (Benth.) Reveal - SIMPSON'S BUCKWHEAT

[*Eriogonum microthecum* Nutt. var. *foliosum* (Torr. & Gray) Reveal,] Shrub; C, pinon-juniper woodlands; MH 628, 735.

Eriogonum ovalifolium Nutt. var. *purpureum* (Nutt.) Dur. - CUSHION BUCKWHEAT

Perennial herb; U, clayey soils, pinon-juniper woodlands; MH 189.

Eriogonum palmerianum Reveal - PALMER'S BUCKWHEAT

Annual herb; C, canyons, hillsides, and mesas; MH 65, 117, 185.

Eriogonum racemosum Nutt. - REDROOT BUCKWHEAT

Perennial herb; U, pinon-juniper woodlands, Kaiparowits Plateau; MH 723.

Eriogonum scabrellum Reveal - WESTWATER BUCKWHEAT
Annual herb; U, Tropic Shale, desert shrub; SLW 10932.

Eriogonum shockleyi S. Wats. var. *shockleyi*- SHOCKLEY'S BUCKWHEAT
[*Eriogonum shockleyi* S. Wats. var. *longilobum* (M.E. Jones) Reveal,] Perennial herb; O,
hills, mesas, and benches, desert shrub to pinon-juniper woodlands; MH 412, 413, 479.

Eriogonum umbellatum Torr. var. *subaridum* S. Stokes - SULPHUR-FLOWER BUCKWHEAT
Perennial herb; U, C landscaping and Kaiparowits Plateau; MH 663, 722.

Eriogonum wetherillii Eastw. - WETHERILL'S BUCKWHEAT
Annual herb; C, benches, hillsides, and canyon bottoms, desert shrub; MH 76, 530.

**Polygonum aviculare* L. - PROSTRATE KNOTWEED
Annual herb; O, disturbed sites; MH 99, 270, 298.

**Polygonum lapathifolium* L. - CURLYTOP KNOTWEED
Annual herb; C, canyon bottoms in moist soils; MH 200.

Rumex hymenosepalus Torr. - CANAIGRE DOCK
Perennial herb; O, sandy soils, desert shrub; MH 434, GR 1673.

Rumex maritimus L. - GOLDEN DOCK
Annual herb; O, disturbed sites, Clay Hills take-out; MH 568, 701.

Rumex salicifolius Weinm. - WILLOW DOCK
Perennial herb; U, salt desert shrub communities; KH 18575.

Stenogonum flexum (M.E. Jones) Reveal & J.T. Howell - BENT TWO-WHORL BUCKWHEAT
[*Eriogonum flexum* M.E. Jones] Annual herb; C, clayey soils, desert shrub to pinon-
juniper woodlands; MH 165, 477, 597.

Portulacaceae

Portulaca halimoides L. - SILKCOTTON PURSLANE
[*Portulaca parvula* Gray] Annual herb; U, Muley Point; SLW 22435.

**Portulaca oleracea* L. - LITTLE HOGWEED
Annual herb; U, disturbed sites; MH 305.

Talinum brevifolium Torr. - PYGMY FLAMEFLOWER
Perennial herb; O, disturbed sites, Lee's Ferry; MH 535.

Primulaceae

Dodecatheon pulchellum (Raf.) Merr. - DARKTHROAT SHOOTINGSTAR
Perennial herb; U, seeps and springs; MH 492.

Primula specuicola Rydb. - CAVEDWELLING PRIMROSE
Perennial herb; C, hanging gardens; JF 109, 438, 771, 806, GR 1687.

Ranunculaceae

Anemone tuberosa Rydb. - TUBER ANEMONE
Perennial herb; O, canyon bottoms; MH 70.

Aquilegia micrantha Eastw. - MANCOS COLUMBINE
Perennial herb; C, hanging gardens; MH 190.

Clematis ligusticifolia Nutt. - WESTERN WHITE CLEMATIS
Perennial herb; O, riparian; DG 12.

Delphinium nuttallianum Pritz - TWOLOBE LARKSPUR
Perennial herb; U, Kaiparowits Plateau; BJ s.n. (GLCAHERB).

Delphinium scaposum Greene - TALL MOUNTAIN LARKSPUR
[*Delphinium andersonii* Gray var. *scaposum* (Greene) Welsh] Perennial herb; C, mesas, benches, and hillsides, desert shrub to pinon-juniper woodlands; MH 59, 104, 552.

Ranunculus cymbalaria Pursh - ALKALI BUTTERCUP
Perennial herb; O, riparian, Lake Canyon; JRS 4944.

Rhamnaceae

Ceanothus gregii Gray var. *franklinii* Welsh - DESERT CEANOOTHUS
Shrub; O, rimrock, Muley Point; MH 515, SLW 22244 (type).

Frangula betulifolia (Greene) V. Grub. ssp. *ovata* (Kearney & Peebles) Kartesz & Gandhi -
OBOVATE BUCKTHORN
[*Rhamnus betulifolia* Greene] Shrub; O, canyon bottoms and hanging gardens, riparian; MH 482.

Rosaceae

Amelanchier utahensis Koehne - UTAH SERVICEBERRY
Shrub; O, canyon bottoms and uplands; MH 100, JRS 5231.

Cercocarpus intricatus S. Wats. - LITTLELEAF MOUNTAIN MAHOGANY
Shrub; O, rimrock, Muley Point; MH 509.

Cercocarpus montanus Raf. - ALDERLEAF MOUNTAIN MAHOGANY
Shrub; O, pinon-juniper woodlands, Orange Cliffs; LMS 6933.

Coleogyne ramosissima Torr. - BLACKBRUSH
Shrub; W, uplands; MH 435.

Fallugia paradoxa (D. Don) Endl. ex Torr. - APACHE PLUME
Shrub; C, canyons and washes; MH 499.

Petrophyton caespitosum (Nutt.) Rydb. - MAT ROCKSPIREA
Perennial herb; C, hanging gardens; DG 18.

Potentilla paradoxa Nutt. - PARADOX CINQUEFOIL
Perennial herb; O, canyon bottoms, Grand Bend Canyon; MH 714.

Potentilla rivalis Nutt.(Gray) W.A. Weber & A. Löve - BROOK CINQUEFOIL
Biennial herb; O, lake margins; MH 198.

Purshia stansburiana (Torr.) Henrickson - STANSBURY CLIFFROSE
[*Purshia mexicana* (D. Don) Henrickson var. *stansburiana* (Torr.) Welsh,] Shrub; W,
canyon bottoms, washes, and uplands; MH 116, GR 1793.

Purshia tridentata (Pursh) DC. - ANTELOPE BITTERBRUSH
Shrub; O, pinon-juniper woodlands; LCH 13219.

Rosa woodsii Lindl. - WOODS' ROSE
Shrub; O, hanging gardens and canyon bottoms, riparian; JF 782, PC (CARE 2998).

Rubus neomexicanus Gray - NEW MEXICO RASPBERRY
Shrub; O, hanging gardens; JF 913.

Rubiaceae

Galium aparine L. - STICKYWILLY
Annual herb; U, canyon bottoms, Cow Canyon; JRS 4975.

Galium bifolium S. Wats. - TWINLEAF BEDSTRAW
Annual herb; U, pinon-juniper woodlands, Kaiparowits Plateau; SLW 27453.

Galium coloradoense W. Wight - COLORADO BEDSTRAW
[*Galium multiflorum* Kellogg var. *coloradoense* (W. Wight) Cronq.,] Perennial herb; O,
canyon bottoms and hillsides, Dark Canyon; MH 386. Leaves 5-10 times longer than
broad.

Galium multiflorum Kellogg - SHRUBBY BEDSTRAW
Perennial herb; C, canyon bottoms, hillsides, mesas, and uplands; MH 109, 541, 673, JRS
5230. Leaves <5 times longer than broad.

Galium proliferum Gray - LIMESTONE BEDSTRAW
Annual herb; U, hanging gardens; MH 66, SLW 22162.

Rutaceae

Ptelea trifoliata L. ssp. *pallida* (Greene) V.L. Bailey - PALLID HOPTREE

Shrub; U, canyon bottoms, Finger Rock, Colorado River –7 mi; MH 400, 436.

Thamnosma montana Torr. & Frém. - TURPENTINEBROOM

Shrub; U, desert shrub, southern part of the park; NDA 3145.

Salicaceae

Populus fremontii S. Wats. - FREMONT COTTONWOOD

Tree; O, canyon bottom, riparian; SLW 21748.

Salix exigua Nutt. - NARROWLEAF WILLOW

Shrub; C, canyon bottoms, riparian; MH 218.

Salix gooddingii Ball - GOODDING'S WILLOW

Tree; O, riparian; MH 232, NDA 22587.

Salix lutea Nutt. - YELLOW WILLOW

Tree; O, riparian; SLW 21776.

Santalaceae

Comandra umbellata (L.) Nutt. ssp. *pallida* (A. DC.) Piehl - PALE BASTARD TOADFLAX

[*Comandra pallida* A. DC.] Perennial herb; C, canyon bottoms, mesas, and benches; MH 49.

Saxifragaceae

Heuchera rubescens Torr. - PINK ALUMROOT

Perennial herb; U, Corral Ridge; MH 734.

Lithophragma tenellum Nutt. - SLENDER WOODLAND-STAR

Perennial herb; O, Navajo Point; BJ (GLCAHERB).

Scrophulariaceae

Castilleja applegatei Fern. ssp. *martinii* (Abrams) Chuang & Heckard - WAVYLEAF INDIAN PAINTBRUSH

Perennial herb; C, canyons, hillsides, and mesas, desert shrub to pinon-juniper; MH 463, 514, GR 1660.

Castilleja linariifolia Benth. - WYOMING INDIAN PAINTBRUSH

Perennial herb; C, canyon bottoms and hanging gardens, riparian; MH 201, 247, JF 102,316, 1066.

Castilleja minor (Gray) Gray ssp. *minor* (Gray) Gray - LESSER INDIAN PAINTBRUSH

[*Castilleja exilis* A. Nels.] Annual herb; O, canyon bottoms, riparian; MH 246.

Castilleja scabrida Eastw. - ROUGH INDIAN PAINTBRUSH

Perennial herb; O, mesas, Orange Cliffs; SLW 21838.

Collinsia parviflora Lindl. - MAIDEN BLUE EYED MARY
Annual herb; O, Navajo Point; JRS 5646.

Cordylanthus wrightii Gray - WRIGHT'S BIRD'S BEAK
Annual herb; O, sandy soils, desert shrub to pinon-juniper woodlands; MH 368.

Mimulus eastwoodiae Rydb. - EASTWOOD'S MONKEYFLOWER
Perennial herb; O, hanging gardens; DG 14.

Mimulus glabratus Kunth - ROUNDLEAF MONKEYFLOWER
Perennial herb; U, hanging gardens, Escalante River; SLW 22122.

Mimulus guttatus Dc. - SEEP MONKEYFLOWER
Annual herb; U, 50 mile Canyon; NDA 3205.

Mimulus rubellus Gray - LITTLE REDSTEM MONKEYFLOWER
Annual herb; O, disturbed sites, Waterhole Flat; MH 156.

Pedicularis centranthera Gray - DWARF LOUSEWORT
Perennial herb; O, mesas, pinon-juniper woodlands; MH 542.

Penstemon ambiguus Torr. var. *laevissimus* (Keck) N. Holmgren - PINK PLAINS
BEARDTONGUE
Perennial herb; C, sandy soils, desert shrub; MH 12, 97.

Penstemon angustifolius Nutt. ex Pursh var. *venosus* - BROADBEARD BEARDTONGUE
Perennial herb; O, pinon-juniper woodlands, Orange Cliffs; MH 618.

Penstemon carnosus Pennell - FLESHY BEARDTONGUE
Perennial herb; U, pinon-juniper woodlands, Orange Cliffs; LMS 7390.

Penstemon comarrhenus Gray - DUSTY BEARDTONGUE
Perennial herb; O, uplands and mesas, pinon-juniper woodlands; MH 637.

Penstemon cyanocaulis Payson - BLUESTEM BEARDTONGUE
Perennial herb; O, hillsides and mesas, Flint Flat; JT 556.

Penstemon eatonii Gray ssp. *eatonii* - EATON'S PENSTEMON
Perennial herb; W, canyon bottoms and mesas, desert shrub to pinon-juniper woodland;
MH 497, 626. Herbage glabrous.

Penstemon eatonii Gray ssp. *undosus* (M.E. Jones) Keck - EATON'S PENSTEMON
Perennial herb; O, canyon bottoms, desert shrub; GR 1684. Herbage finely puberulent.

Penstemon palmeri Gray - PALMER'S PENSTEMON
Perennial herb; O, canyons, Middle Moody Canyon; SLW 22278.

Penstemon rostriflorus Kellogg - BRIDGE PENSTEMON
Perennial herb; U, Corral Ridge; MH 736.

Penstemon strictiformis Rydb. - MANCOS PENSTEMON
Perennial herb; O, pinon-juniper woodlands, Orange Cliffs; MH 639.

Penstemon utahensis Eastw. - UTAH PENSTEMON
Perennial herb; C, uplands hillsides and canyons; MH 170, GR 1780.

**Verbascum thapsus* L. - COMMON MULLEIN
Biennial herb; O, disturbed sites, Lee's Ferry; MH 614.

Veronica americana Schwein. ex Benth. - AMERICAN SPEEDWELL
Perennial herb; O, moist sites, Colorado River -6 miles; JRS 5005.

**Veronica anagallis-aquatica* L. - WATER SPEEDWELL
Perennial herb; C, riparian; MH 211, 254, 303.

**Veronica biloba* L. - TWOLOBE SPEEDWELL
Annual herb; O, weed in lawn, Wahweap Marina; MH 668.

Veronica peregrina L. - NECKWEED
Annual herb; O, riparian, San Juan River and Stevens Canyon; NDA 22487, SLW 22299.

Solanaceae

Calibrachoa parviflora (Juss.) D'Arcy - SEASIDE PETUNIA
[*Petunia parviflora* Juss.] Annual herb; U, lake shore, Cottonwood Canyon; MH 67.

Datura wrightii Regel - SACRED THORN-APPLE
[*Datura meteloides* auct. p.p. non Dunal] Perennial herb; O, washes, desert shrub; MH 584, NDA 22559.

Lycium andersonii Gray - WATER JACKET
Shrub; O, canyon hillsides, desert shrub; MH 480, GR 1792.

Lycium pallidum Miers - PALE DESERT-THORN
Shrub; U, Slickhorn Canyon; JM s.n. (GLCAHERB).

Nicotiana obtusifolia Mertens & Galeotti var. *obtusifolia* - DESERT TOBACCO
[*Nicotiana trigonophylla* Dunal] Perennial herb; O, cliff bases and rock crevices, desert shrub; MH 22.

Solanum elaeagnifolium Cav. - SILVERLEAF NIGHTSHADE
Perennial herb; O, disturbed sites, San Juan River; MH 225.

**Solanum ptychanthum* Dunal - WEST INDIAN NIGHTSHADE
[*Solanum nigrum* L.] Annual herb; O, disturbed sites; MH 207, 282.

Solanum triflorum Nutt. - CUTLEAF NIGHTSHADE
Annual herb; O, disturbed sites; MH 682.

Tamaricaceae

**Tamarix chinensis* Lour. - FIVESTAMEN TAMARISK
[*Tamarix pentandra* Pallas] Shrub; W, riparian; MH 141.

Ulmaceae

Celtis laevigata Willd. var. *reticulata* (Torr.) L. Benson - NETLEAF HACKBERRY
[*Celtis reticulata* Torr.] Tree; O, canyon bottoms and hanging gardens; JF 114, 132.

**Ulmus pumila* L. - SIBERIAN ELM
Tree; U, disturbed sites; MH 283.

Urticaceae

Parietaria pensylvanica Muhl. ex Willd. - PENNSYLVANIA PELLITORY
Annual herb; O, hanging gardens and canyon bottoms, moist places; MH 38, 698.

Verbenaceae

Verbena bracteata Lag. & Rodr. - BIGRACT VERBENA
Perennial herb; O, disturbed sites; MH 159, 261, 572.

Violaceae

Viola nephrophylla Greene - NORTHERN BOG VIOLET
Perennial herb; O, hanging gardens and canyon bottoms, riparian; MH 322, EGN 1.

Viscaceae

Arceuthobium divaricatum Engelm. - PINYON DWARF MISTLETOE
Perennial herb; O, parasite on pinon pines; MH 642, JRS 5235.

Phoradendron juniperinum Engelm. ex Gray - JUNIPER MISTLETOE
Perennial herb; O, parasite on junipers; MH 643.

Vitaceae

Parthenocissus vitacea (Knerr) A.S. Hitchc. - WOODBINE
Perennial herb; O, canyon bottoms and hanging gardens, riparian; NDA 22575, JF 248, 275.

Zygophyllaceae

**Tribulus terrestris* L. - PUNCTUREVINE
Annual herb; O, disturbed sites; MH 350.

MAGNOLIOPHYTA: LILIOPSIDA

Agavaceae

Agave utahensis Engelm. var. *kaibabensis* (McKelvey) Breitung - KAIBAB AGAVE
Succulent shrub; R, sandstone outcrop; MH 720.

Yucca angustissima Engelm. ex Trel. var. *angustissima*- NARROWLEAF YUCCA
Succulent shrub; C, sandy sites; MH 121, 123. Scape & infl.<1.8m tall.

Yucca angustissima Engel. Ex Trel. var. *toftiae* (Welsh) Reveal - TOFT'S YUCCA
[*Yucca toftiae* Welsh] Succulent shrub; O, sandstone outcrops and hanging gardens; SLW 11935a (holotype), 22116. Scape & infl.>2m tall.

Yucca baileyi Woot. & Standl. - NAVAJO YUCCA
Succulent shrub; U, canyons and uplands; SLW 22304, NDA 3563.

Yucca harrimaniae- SPANISH BAYONET

Succulent shrub; U, hillsides and mesas, pinon-juniper woodlands, Flint Trail; SLW 9878.

Commelinaceae

Tradescantia occidentalis (Britt.) Smyth - PRAIRIE SPIDERWORT
Perennial herb; U, canyons, moist soils, Cottonwood Canyon; NDA 22613.

Cyperaceae

Carex aquatilis Wahlenb. - WATER SEDGE
Perennial herb; O, canyon bottoms, riparian; VM 78.

Carex aurea Nutt. - GOLDEN SEDGE
Perennial herb; W, hanging gardens and other wet sites; MH 37, 417, 688, JRS 5239.

Carex curatorum Stacey - KAIBAB SEDGE
Perennial herb; C, hanging gardens; MH 686, 694, 696.

Carex hassei L. H. Bailey - SALT SEDGE
Perennial herb; U, hanging gardens; JRS 4899, 5023a (determined by M. Fritz).

Carex hystericina Muhl. ex Willd. - BOTTLEBRUSH SEDGE
Perennial herb; O, riparian; MH 244.

Carex occidentalis Bailey - WESTERN SEDGE
Perennial herb; U, riparian; BTW 1466.

Carex pellita Muhl ex Willd. - WOOLLY SEDGE
[*Carex lanuginosa* auct. non Michx.] Perennial herb; C, riparian; MH 40, 42, JRS 4881.

Carex praegracilis W. Boott - CLUSTERED FIELD SEDGE
Perennial herb; U, riparian, Lone Rock; MH 656 (determined by G. Rink).

Carex rossii Boott - ROSS' SEDGE
Perennial herb; U, riparian; JRS 5018.

Carex specuicola J.T. Howell - NAVAJO SEDGE
Perennial herb; R, hanging gardens; AC2 00-216.

Carex utriculata Boott - NORTHWEST TERRITORY SEDGE
[*Carex rostrata* Stokes var. *utriculata* (Boott) Bailey,] Perennial herb; U, riparian; KH 18581.

Cladium californicum (Wats.) O'Neill - CALIFORNIA SAWGRASS
Perennial herb; R, hanging gardens; JF 242, KH 18605.

Cyperus squarrosus L. - BEARDED FLATSEDGE
[*Cyperus aristatus* Rottb.] Annual herb; O, riparian; MH 324.

Cyperus strigosus L. - STRAWCOLORED FLATSEDGE
Perennial herb; O, riparian; MH 335.

Eleocharis palustris (L.) Roemer & J.A. Schultes - COMMON SPIKERUSH
[*Eleocharis macrostachya* Britt.] Perennial herb; W, riparian; MH 19, 39, 139, 334.

Eleocharis rostellata (Torr.) Torr. - BEAKED SPIKERUSH
Perennial herb; O, riparian; MH 58, 323.

Fimbristylis thermalis S. Wats. - HOT SPRINGS FIMBRY
[*Fimbristylis spadicea* auct. non (L.) Vahl] Perennial herb; U, riparian, north of Iceberg Canyon; NDA 3311.

Schoenoplectus acutus (Muhl. ex Bigelow) A.& D. Löve - HARDSTEM BULRUSH
[*Scirpus acutus* Muhl. ex Bigelow] Perennial herb; O, riparian; MH 653, 709.

Schoenoplectus maritimus (L.) Lye - COSMOPOLITAN BULRUSH
[*Scirpus paludosus* A. Nels.] Perennial herb; C, riparian, newly exposed beaches; MH 367, 443, 655.

Schoenoplectus pungens Vahl var. *longispicatus* (Britton) Cronq. - COMMON THREESQUARE
Perennial herb; C, riparian; MH 21, 57, 319.

Schoenoplectus tabernaemontani C.C. Gmelin - SOFTSTEM BULRUSH
[*Scirpus validus* Vahl] Perennial herb; O, riparian; MH 252.

Scirpus microcarpus J.& K. Presl - PANICLED BULRUSH
Perennial herb; U, riparian, Coyote Gulch; MH 243.

Juncaceae

Juncus articulatus L. - JOINTLEAF RUSH

Perennial herb; O, riparian, Colorado River below Glen Canyon Dam; MH 1, 287.

Juncus balticus Willd. var. *montanus* Engelm. - MOUNTAIN RUSH

[*Juncus arcticus* Willd.] Perennial herb; W, riparian; MH 20, KH 19287.

Juncus bufonius L. - TOAD RUSH

Annual herb; O, riparian; MH 48.

Juncus ensifolius Wikstr. - SWORDLEAF RUSH

Perennial herb; O, riparian; NDA 22586.

Juncus longistylis Torr. - LONGSTYLE RUSH

Perennial herb; O, riparian; MH 209, JRS 5232.

Juncus nodosus L. - KNOTTED RUSH

Perennial herb; O, canyon bottoms and hanging gardens, riparian; JRS 5012, 4900.

Juncus saximontanus A. Nels. - ROCKY MOUNTAIN RUSH

Perennial herb; O, riparian; KH 19280.

Juncus tenuis Willd. - POVERTY RUSH

Perennial herb; O, riparian; MH 416, 691.

Juncus torreyi Coville - TORREY'S RUSH

Perennial herb; O, riparian; VM s.n. (GLCAHERB).

Liliaceae

Allium macropetalum Rydb. - LARGEFLOWER ONION

Perennial herb; U, sandy soils, near Lee's Ferry; JZ 5.

Allium nevadense S. Wats. - NEVADA ONION

Perennial herb; O, desert shrub to pinon-juniper woodlands; SLW 21930.

Allium textile A. Nels. & J.F. Macbr. - TEXTILE ONION

Perennial herb; O, clayey soils, desert shrub to pinon-juniper woodlands; SLW 21832.

Androstephium breviflorum S. Wats. - PINK FUNNEL LILY

Perennial herb; U, clayey soils, benches; RWA 322, NDA 4548.

**Asparagus officinalis* L. - GARDEN ASPARAGUS

Perennial herb; U, riparian, Lee's Ferry; MH 356.

Calochortus aureus S. Wats. - GOLDEN MARIPOSA LILY

Perennial herb; U, benches, Orange Cliffs; SLW 21956.

Calochortus flexuosus S. Wats. - WINDING MARIPOSA LILY

Perennial herb; C, canyons and uplands, desert shrub; NDA 3729.

Calochortus nuttallii Torr. & Gray - SEGO LILY

Perennial herb; U, canyons, mesas, and hillside; PC (CARE 2452).

Eremocrinum albomarginatum (M.E. Jones) M.E. Jones - LONELY LILY

Perennial herb; U, bottomlands and benches, desert shrub; MH 118, GR 1690, 1721.

Maianthemum stellatum (L.) Link - STARRY FALSE LILY OF THE VALLY

[*Smilacina stellata* (L.) Desf.] Perennial herb; O, riparian, hanging gardens; SLW 22353, KH 18586.

Zigadenus paniculatus (Vail) Welsh & Atwood - FOOTHILL DEATHCAMAS

Perennial herb; U, sandy soil, blackbrush communities; MH 192.

Zigadenus vaginatus (Rydb.) J.F. Macbr. - SHEATHED DEATHCAMAS

Perennial herb; O, hanging gardens; JF 1032.

Orchidaceae

Epipactis gigantea Dougl. ex Hook. - STREAM ORCHID

Perennial herb; O, hanging gardens and seeps; MH 290, 493, DG 5, NDA 22600, 22583, JF 926.

Platanthera zothecina (Higgins & Welsh) Kartesz & Gandhi- ALCOVE BOG ORCHID

[*Habenaria zothecina* Higgins & Welsh] Perennial herb; U, hanging gardens; JF 311, 503, 813, 931.

Poaceae

Achnatherum aridum (M.E. Jones) Barkworth - MORMON NEEDLEGRASS

[*Stipa arida* M.E. Jones] Perennial herb; U, hillsides and canyon bottoms; KH 18490.

Achnatherum hymenoides (Roemer & J.A. Schultes) Barkworth - INDIAN RICEGRASS

[*Stipa hymenoides* Roemer & J.A. Schultes, *Oryzopsis hymenoides* Roemer & J.A. Schultes) Ricker ex Piper] Perennial herb; W, hills, mesas, benches, and canyons; MH 124.

Achnatherum lettermanii (Vasey) Barkworth - LETTERMAN'S NEEDLEGRASS

[*Stipa lettermanii* Vasey] Perennial herb; U, canyons, Millard Canyon; JRS 5235.

Achnatherum parishii (Vasey) Barkworth var. *parishii*- PARISH'S NEEDLEGRASS

[*Stipa coronata* Thurb.] Perennial herb; U, canyons, Middle Moody Canyon; SLW 22281.

Achnatherum speciosum (Trin. & Rupr.) Barkworth - DESERT NEEDLEGRASS
[*Stipa speciosa* Trin. & Rupr.] Perennial herb; C, canyon bottoms and hillsides; MH 46, 671.

Achnatherum bloomeri (Boland.) Barkworth -
[*Stipa x bloomeri* Boland.] Perennial herb; O, canyon bottoms and hillsides, Lee's Ferry and Slickhorn Canyon; NDA 5210, 22591.

**Agropyron cristatum* (L.) Gaertn. - CRESTED WHEATGRASS
Perennial herb; O, disturbed sites; MH 376.

**Agrostis stolonifera* L. - CREEPING BENTGRASS
[*Agrostis alba* auct. non L.] Perennial herb; C, riparian; MH 205, 241, 274, 290, 291, 321, JRS 5238.

Andropogon gerardii Vitman - BIG BLUESTEM
Perennial herb; U, riparian, poor specimen; NDA 4355.

Andropogon glomeratus (Walt.) B.S.P. - BUSHY BLUESTEM
Perennial herb; O, riparian; MH 695.

Aristida adscensionis L. - SIXWEEKS THREEAWN
Annual herb; U, canyon bottom, Hall's Creek; PC (CARE 2596).

Aristida arizonica Vasey - ARIZONA THREEAWN
Perennial herb; U, canyon bottoms, San Juan Arm; KH 21011.

Aristida purpurea Nutt. var. *longiseta* (Steud.) Vasey - FENDLER THREEAWN
[*Aristida longiseta* Steud.] Perennial herb; C, sandy washes; MH 128, 465, GR 1672.
Awn 4-8cm long; panicles open.

Aristida purpurea Nutt. var. *nealleyi* (Vasey) Allred - BLUE THREEAWN
[*Aristida glauca* (Nees) Walp.] Perennial herb; W, rocky slopes, mesas, and benches; MH 5, 80, GR 1663, 1788, 1801. Awn 1.5-3.5cm long; panicles contracted.

**Avena sativa* L. - COMMON OAT
Annual herb; U, disturbed sites; KH 19278.

Bothriochloa barbinodis (Lag.) Herter - CANE BLUESTEM
[*Andropogon barbinodis* Lag.] Perennial herb; O, canyon bottoms, riparian; MH 346, NDA 23340.

Bothriochloa laguroides (DC.) Herter ssp. *torreyana* (Steud.) Allred & Gould - SILVER BEARDGRASS

[**Bothriochloa saccharoides* (Sw.) Rydb.] Perennial herb; U, canyon bottoms, dry washes; JRS 5053, SLW 22356, NDA 3165.

Bothriochloa springfieldii (Gould) Parodi - SPRINGFIELD'S BEARDGRASS
Perennial herb; U, canyon bottom, riparian, Great Bend Hanging Garden; MH 710.

Bouteloua aristidoides (Kunth) Griseb. - NEEDLE GRAMA
Annual herb; O, washes, Lee's Ferry; MH 396.

Bouteloua barbata Lag. - SIXWEEKS GRAMA
Annual herb; O, canyon bottoms, riparian; MH 299, 399, NDA 23352.

Bouteloua curtipendula (Michx.) Torr. - SIDEOATS GRAMA
Perennial herb; O, hillsides and canyon bottoms; MH 466.

Bouteloua eriopoda (Torr.) Torr. - BLACK GRAMA
Perennial herb; O, pinon-juniper woodlands, Taylor Flat; LCA 775.

Bouteloua gracilis (Willd. ex Kunth) Lag. ex Grif - BLUE GRAMA
Perennial herb; C, benches, mesas, and canyon bottoms; MH 635, PC (CARE 2607).

**Bromus diandrus* Roth - RIPGUT BROME
[*Bromus rigidus* Roth var. *gussonei* (Parl.) Coss. & Durieu,] Annual herb; C, disturbed sites, riparian; MH 18.

**Bromus inermis* Leyss. - SMOOTH BROME
Perennial herb; U, disturbed sites, Waterhole Flat; MH 149.

**Bromus japonicus* Thunb. - JAPANESE BROME
Annual herb; O, disturbed sites, canyon bottoms; MH 226, 681.

Bromus marginatus Nees Ex Steud. - MOUNTAIN BROME
[*Bromus carinatus* Hook. & Arn.] Perennial herb; O, canyon bottom, riparia; MH 35.

**Bromus rubens* L. - RED BROME
Annual herb; C, disturbed sites, canyon bottoms; MH 6.

**Bromus tectorum* L. - CHEATGRASS
Annual herb; W, hillsides, mesas, benches, washes, canyon bottoms, and hanging gardens; MH 16, JF 794, 877.

Cenchrus spinifex Cav. - COASTAL SANDBUR
[*Cenchrus incertus* M.A. Curtis] Annual herb; U, disturbed sites, Wahweap Housing Area; JRS 5056.

**Cortaderia selloana* (J.A. & J.H. Schultes) Aschers - URUGUAYAN PAMPAS GRASS
Perennial herb; U, riparian, Colorado River -14.6 miles; MK s.n. (GLCAHERB).

**Cynodon dactylon* (L.) Pers. - BERMUDAGRASS
Perennial herb; O, riparian, Colorado River miles -6.5; JRS 5007.

**Dactylis glomerata* L. - ORCHARDGRASS
Perennial herb; U, riparian, Grand Bench; NDA 4262.

Dasyochloa pulchella (Kunth) Willd. ex Rydb. - LOW WOOLLYGRASS
[*Tridens pulchellus* (Kunth) A.S. Hitchc.] Perennial herb; O, hillsides and benches, desert shrub to pinon-juniper woodlands; MH 484, 579.

Dichanthelium acuminatum (Sw.) Gould & C.A. Clark- TAPERED ROSETTE GRASS
[*Panicum acuminatum* Sw.] Perennial herb; C, canyon bottoms and hanging gardens, riparian; MH 56, 202, JF 263, 337, 969, 992.

Dichanthelium oligosanthes (J.A. Schultes) Gould - HELLER'S ROSETTE GRASS
[*Panicum oligosanthes* J.A. Schultes] Perennial herb; O, canyon bottoms; GR 4247.

Distichlis spicata (L.) Greene - INLAND SALTGRASS
[*Distichlis stricta*,] Perennial herb; O, canyon bottoms, riparian; MH 13, 184.

**Echinochloa crus-galli* (L.) Beauv. - BARNYARDGRASS
Annual herb; U, disturbed sites, canyon bottoms, riparian; MH 307, 667.

Elymus canadensis L. - CANADA WILDRYE
Perennial herb; C, canyon bottoms and hanging gardens, riparian; MH 372, JF 880, 986.

Elymus elymoides (Raf.) Swezey - SQUIRRELTAIL
Perennial herb; C, canyon bottoms, mesas, and benches; MH 92, 112, 129, 551, 598, 647.

Elymus lanceolatus (Scribn. & J.G. Sm.) Gould - STREAMBANK WHEATGRASS
Perennial herb; U, pinon-juniper woodlands, Bull Ridge; MH 725.

**Elymus repens* (L.) Gould - QUACKGRASS
Perennial herb; U, moist soils, disturbed sites, Fence Canyon; MH 271.

Elymus trachycaulus (Link) Gould ex Shinners ssp. *trachycaulus* (Link) Gould ex Shinner - SLENDER WHEATGRASS
Perennial herb; O, hanging gardens and stream banks, riparian; MH 43, 406.

Enneapogon desvauxii Desv. ex Beauv. - NINEAWN PAPPUSGRASS
Perennial herb; U, benches, desert shrub, Hole-in-the-Rock; SLW 19390.

**Eragrostis curvula* (Schrad.) Nees - WEEPING LOVEGRASS

Perennial herb; U, disturbed sites, Lee's Ferry; MH 349.

Eragrostis mexicana (Hornem.) Link ssp. *virescens* (C. Presl.) Koch & E. Sanchez - MEXICAN LOVEGRASS

Annual herb; O, canyon bottoms and hanging gardens, riparian; MH 302, 325, 707.

Eragrostis pectinacea (Michx.) Nees ex Steud. - TUFTED LOVEGRASS

Annual herb; U, benches, desert shrub, Hole-in-the-Rock; SLW 19391.

Erioneuron pilosum (Buckl.) Nash - HAIRY WOOLLYGRASS

Perennial herb; U, canyon bottoms, Middle Moody Canyon; SLW 22289.

Glyceria striata (Lam.) A.S. Hitchc. - FOWL MANNAGRASS

Perennial herb; U, canyon bottoms, riparian, Willow Gulch; JRS 5226.

Hesperostipa comata (Trin. & Rupr.) Barkworth ssp. *comata*- NEEDLE AND THREAD

[*Stipa comata* Trin. & Rupr.] Perennial herb; C, canyon bottoms, mesas, and benches; MH 135, SLW 21717.

Hesperostipa neomexicana (Thurb. ex Coult.) Barkworth - NEW MEXICO FEATHERGRASS

[*Stipa neomexicana* (Thurb. ex Coult.) Scribn.] Perennial herb; O, mesas, Orange Cliffs Road; SLW 21978.

Hordeum jubatum L. - FOXTAIL BARLEY

Perennial herb; U, canyon bottoms, Hall's Creek Drainage; PC (CARE 2658).

**Hordeum murinum* L. ssp. *glaucum* (Steud.) Tzvelev - SMOOTH BARLEY

[*Hordeum stebbinsii* Covas] Annual herb; O, disturbed sites and canyon bottoms; MH 54, 419.

Imperata brevifolia Vasey - CALIFORNIA SATINTAIL

Perennial herb; U, canyon bottoms, riparian, Wilson's Creek; JRS 5229.

Leersia oryzoides (L.) Sw. - RICE CUTGRASS

Perennial herb; U, riparian, Colorado River -9 mile; VM 176.

Leymus salinus (M.E. Jones) A. Löve ssp. *salinus*- SALINE WILDRYE

[*Elymus salinus* M.E. Jones] Perennial herb; C, hillsides, mesas, and benches, desert shrub to pinon-juniper woodlands; MH 173, 676.

Leymus triticoides (Buckl.) Pilger - BEARDLESS WILDRYE

[*Elymus triticoides* Buckl.] Perennial herb; U, benches and hanging gardens; SLW 11695.

**Lolium arundinaceum* (Schreb.) S.J. Darbyshire - TALL FESCUE

Perennial herb; U, riparian, Colorado River -9 mile; VM 120.

**Lolium pratense* (Huds.) S.J. Darbyshire - MEADOW RYEGRASS
[*Festuca pratensis* Huds.] Perennial herb; O, riparian, San Juan River; MH 219.

Lycurus phleoides Kunth - COMMON WOLFSTAIL
Perennial herb; U, canyon bottoms, Baker's Ranch; PC (CARE 2664).

Muhlenbergia andina (Nutt.) A.S. Hitchc. - FOXTAIL MUHLY
Perennial herb; C, hanging gardens and canyon bottoms, riparian; JF 876, JRS 4955.

Muhlenbergia asperifolia (Nees & Meyen ex Trin.) Parodi - SCRATCHGRASS
Perennial herb; C, canyon bottoms, riparian; MH 343.

Muhlenbergia pauciflora Buckl. - NEW MEXICO MUHLY
[*Sporobolus asperifolius* (Nees & Meyen ex Trin.) Nees] Perennial herb; O, canyon bottoms, mesas, and benches; SLW 22439, NDA 23332.

Muhlenbergia porteri Scribn. ex Beal - BUSH MUHLY
Perennial herb; U, canyon hillsides, Colorado River -7 mile; JM s.n. (GLCAHERB).

Muhlenbergia pungens Thurb. - SANDHILL MUHLY
Perennial herb; O, sandy soils, hillsides, washes, and canyon bottoms; MH 260.

Muhlenbergia racemosa (Michx.) B.S.P. - MARSH MUHLY
Perennial herb; U, springs and hanging gardens, LeRay Cove; KH 19279.

Muhlenbergia thurberi Rydb. - THURBER'S MUHLY
Perennial herb; C, dry or moist sites of hanging gardens; MH 692.

Monroa squarrosa (Nutt.) Torr. - FALSE BUFFALOGRASS
Annual herb; U, disturbed sites, pinon-juniper woodlands; LMS 7342.

Panicum capillare L. - WITCHGRASS
Annual herb; C, disturbed sites, riparian; MH 333, 357, 405.

Panicum obtusum Kunth - VINE MESQUITE
Perennial herb; O, sandy sites along rivers, riparian; MH 220, 306.

Panicum virgatum L. - SWITCHGRASS
Perennial herb; O, canyon bottoms and hanging gardens, riparian; MH 251, NDA 22590, 23347, JF 253.

Pascopyrum smithii (Rydb.) A. Löve(Gray) W.A. Weber & A. Löve - WESTERN WHEATGRASS
[*Elymus smithii* (Rydb.) Gould] Perennial herb; O, canyon bottoms; MH 217, JRS 4947.

Phalaris arundinacea L. - REED CANARYGRASS

Perennial herb; U, riparian, San Juan River; MH 239.

**Phleum pratense* L. - TIMOTHY

Perennial herb; U, Muley Point; LCH 14236a.

Phragmites australis (Cav.) Trin. ex Steud. - COMMON REED

[*Phragmites communis* Trin.] Perennial herb; C, riparian; MH 339.

Pleuraphis jamesii Torr. - JAMES' GALLETA

[*Hilaria jamesii* (Torr.) Benth.] Perennial herb; O, washes; MH 130, SLW 21912.

Poa bigelovii Vasey & Scribn. - BIGELOW'S BLUEGRASS

Annual herb; U, canyon bottoms, riparian, Navajo Canyon; GR 1685.

**Poa compressa* L. - CANADA BLUEGRASS

Perennial herb; U, benches, pinon-juniper woodlands, Orange Cliffs; MH 640.

Poa fendleriana (Steud.) Vasey - MUTTONGRASS

Perennial herb; C, canyon bottoms and talus slopes; SLW 21937, JRS 4949.

**Poa pratensis* L. - KENTUCKY BLUEGRASS

Perennial herb; U, disturbed sites, Waterhole Flat; MH 158.

Poa secunda J. Presl - SANDBERG BLUEGRASS

[*Poa canbyi* (Scribn.) T.J. Howell] Perennial herb; U, pinon-juniper woodlands; SLW 27451.

**Polypogon interruptus* Kunth - DITCH RABBITSFOOT GRASS

Perennial herb; O, disturbed sites, riparian; KH 18513.

**Polypogon monspeliensis* (L.) Desf. - ANNUAL RABBITSFOOT GRASS

Annual herb; W, riparian; MH 15, 131.

**Polypogon viridis* (Gouan) Breistr. - BEARDLESS RABBITSFOOT GRASS

[*Polypogon semiverticillatus* (Forsk.) Hyl.] Perennial herb; C, canyon bottoms and hanging gardens, moist places; MH 208, 236, DG 4.

Pseudoroegneria spicata (Pursh) A. Löve ssp. *spicata*- BLUEBUNCH WHEATGRASS

[*Elymus spicatus* (Pursh) Gould] Perennial herb; O, canyon bottoms; NDA 23487.

Pseudelymus saxicola (Scribn. & J.G. Sm.) Barkworth & D.R. Dewey - FOXTAIL WHEATGRASS

Perennial herb; U, pinon-juniper woodlands, Bull Ridge; MH 727.

**Saccharum ravennae* (L.) L. - RAVENNAGRASS

[*Erianthus ravennae* (L.) Beauv.] Perennial herb; O, landscaping (Wahweap Marina) and riparian (Lewellyn, Bowns, and San Juan River Canyons); MH 669, 689.

**Schismus arabicus* Nees - ARABIAN SCHISMUS
Annual herb; W, widespread; MH 11, 33, 55, NDA 4560.

**Schismus barbatus* (Loefl. ex L.) Thellung - COMMON MEDITERRANEAN GRASS
[*Festuca barbata* Loefl. ex L.] Annual herb; C, uplands and hillsides, desert shrub; GR 1662.

Schizachyrium scoparium (Michx.) Nash - LITTLE BLUESTEM
Perennial herb; O, canyon bottoms, LeRay Cover; KH 19276.

**Setaria viridis* (L.) Beauv. - GREEN BRISTLEGRASS
Annual herb; O, disturbed sites, Lee's Ferry; MH 353.

Sorghastrum nutans (L.) Nash - INDIANGRASS
Perennial herb; U, canyon bottoms, riparian; JRS 5039.

**Sorghum halepense* (L.) Pers. - JOHNSONGRASS
Perennial herb; U, disturbed sites, Lee's Ferry; MH 354.

Spartina gracilis Trin. - ALKALI CORDGRASS
Perennial herb; O, canyon bottoms, Cow Canyon; SLW 22363, JRS 4964.

Sphenopholis obtusata (Michx.) Scribn. - PRAIRIE WEDGESCALE
Annual herb; U, canyon bottoms and hanging gardens, riparian; NDA 2890.

Sporobolus airoides (Torr.) Torr. - ALKALI SACATON
Perennial herb; O, canyon bottoms and hillsides; MH 161, 230.

Sporobolus compositus (Poir.) Merr. var. *compositus*- COMPOSITE DROPSEED
[*Sporobolus asper* (Michx.) Kunth] Perennial herb; U, sandy sites, Long Canyon; JRS 5052.

Sporobolus contractus A.S. Hitchc. - SPIKE DROPSEED
Perennial herb; O, canyon bottoms; KH 21007.

Sporobolus cryptandrus (Torr.) Gray - SAND DROPSEED
Perennial herb; O, mesas, Hole-in-the-Rock and Waterhole Flat; LCH 14088, JT 501.

Sporobolus flexuosus (Thurb. ex Vasey) Rydb. - MESA DROPSEED
Perennial herb; O, canyon bottoms; JRS 4999, NDA 23348.

Sporobolus giganteus Nash - GIANT DROPSEED
Perennial herb; U, canyon bottoms, Steer Canyon; NDA 23345.

**Thinopyrum ponticum* (Podp.) Z-W. Liu & R.-C. Wang - RUSH WHEATGRASS
[*Elymus elongatus* (Host) Runemark, *Agropyron elongatum* (Host) Beauv.] Perennial
herb; U, canyon bottoms, Cow Canyon; JRS 6965, SLW 22362.

Tridens muticus (Torr.) Nash - SLIM TRIDENS
Perennial herb; U, canyon bottoms, San Juan River; NDA 23270.

Vulpia octoflora (Walt.) Rydb. - SIXWEEKS FESCUE
[*Festuca octoflora* Walt.] Annual herb; W, benches, mesas, hillsides, and canyon
bottoms; SLW 3985, 21818.

Potamogetonaceae

Potamogeton foliosus Raf. - LEAFY PONDWEED
Perennial herb; U, ponds, Explorer Canyon; MH 328.

Potamogeton natans L. - FLOATING PONDWEED
Perennial herb; U, ponds, Explorer Canyon; MH 329.

Potamogeton pusillus L. - SMALL PONDWEED
Perennial herb; U, ponds, Explorer Canyon; NDA 1972 (GLCAHERB).

Typhaceae

Typha domingensis Pers. - SOUTHERN CATTAIL
Perennial herb; O, riparian; MH 366.

Typha latifolia L. - BROADLEAF CATTAIL
Perennial herb; U, riparian, Davis Gulch; NDA 4250.

Zannichelliaceae

Zannichellia palustris L. - HORNED PONDWEED
Perennial herb; U, ponds; JRS 4954.

APPENDIX II

LIST OF REPORTED

BUT UNVOUCHERED VASCULAR PLANTS

OF GLEN CANYON NRA

Species are first arranged by divisions: Pteridophyta, Coniferophyta, and Magnoliophyta.

Magnoliophyta is further divided into the classes Magnoliopsida (dicots) and Liliopsida

(monocots). Taxa are finally arranged alphabetically by families, genera, and species.

Nomenclature and common names follow the USDA PLANTS database (2004). Species names

preceded by a plus sign (+) denotes taxa that are not likely to occur in GLCA NRA while an

asterisk (*) denotes a non-native taxa. The following information is provided for each species,

when available:

A. Common name

B. Relevant synonyms in brackets.

C. If the species occurs in the Glen Canyon NRA region in “Atlas of vascular plants of Utah” (Albee, et al., 1988). This is denoted by “**atlas**”.

D. Reason why the species is not included on the 2005 flora.

E. Distribution of the species both in Utah and potentially in Glen Canyon NRA.

F. A list of neighboring parks where the species is known to occur, see table 10 for park codes and park names.

CONIFEROphyta:

Pinaceae

Pinus ponderosa P.& C. Lawson - PONDEROSA PINE

No voucher for this species could be found. John Spence reports that there are two known trees in the park, one just north of Coyote Gulch and the other on a north-facing cliff near the Great Bend, San Juan Arm. Occurs in BRYC, NABR, CALA, GRCA, CARE, GSENM.

MAGNOLIOPHYTA: MAGNOLIOPSIDA

Aizoaceae

Sesuvium verrucosum Raf. - VERRUCOSE SEAPURSLANE

No voucher for this species could be found. This species is to be expected in the park from low saline and riparian areas in San Juan and Wayne Counties, Utah. Occurs in CALA, GSENM.

Amaranthaceae

**Amaranthus retroflexus* L. - REDROOT AMARANTH

No voucher for this species could be found. This species is to be expected in the park from disturbed sites. Occurs in NABR, GSENM.

Apiaceae

**Apium graveolens* L. - WILD CELERY

No voucher for this species could be found. Reported by John Spence from Horse-shoe bend along the Colorado River, Arizona. Occurs in GRCA at Havasu Canyon.

Lomatium foeniculaceum (Nutt.) Coulter & Rose - DESERT BISCUITROOT

No voucher for this species could be found. It is possible that this species could occur within the park in sagebrush and mountain brush communities in Kane County, Utah. Occurs in GRCA, GSENM.

Apocynaceae

+*Amsonia palmeri* Gray - PALMER'S BLUESTAR

Previous voucher annotated to an unknown taxa. Kearney and Peebles (1960) state that *A. palmeri* occurs at Lee's Ferry but a more recent treatment of Apocynaceae (McLaughlin, 1993) show that in Arizona *A. palmeri* is known from only the following counties: Cochise, Graham, Maricopa, Mohave, Pinal, and Yavapai.

Asclepiadaceae

Asclepias labriformis M.E. Jones - UTAH MILKWEED

atlas No voucher for this species could be found. This species is to be expected in the park from washes of Garfield, San Juan, and Wayne Counties. Occurs in CALA, CARE, GSENM.

Asclepias speciosa Torr. - SHOWY MILKWEED

No voucher for this species could be found. Reported by JRS from East End Spring on Navajo Point, Wilson Creek, and between Glen Canyon Dam and Lee's Ferry along the Colorado River. Occurs in BRYC, ARCH, CALA, GRCA, CARE, GSENM.

Asteraceae

Agoseris glauca (Pursh) Raf. - PALE AGOSERIS

atlas No voucher for this species could be found. This species is to be expected above 4000' in Glen Canyon NRA. Occurs in BRYC, GRCA, CARE, GSENM.

Ambrosia confertiflora Dc. - WEAKLEAF BURR RAGWEED

[*Franseria confertifolia* (DC.) Rydb.]; No voucher for this species could be found. It is possible that this species could occur above Lee's Ferry along the Colorado River. Occurs in GRCA.

Ambrosia tomentosa Nutt. - SKELETONLEAF BURR RAGWEED

atlas No voucher for this species could be found. It is possible that this species could occur along streams in Garfield County, Utah. Occurs in CALA.

Artemisia frigida Willd. - PRAIRIE SAGEWORT

atlas No voucher for this species could be found. This species is to be expected in the park from shadscale, sagebrush, or pinon-juniper communities. Occurs in BRYC, NABR, CALA, GRCA, CARE.

Brickellia californica (Torr. & Gray) Gray - CALIFORNIA BRICKELLBUSH

atlas No voucher for this species could be found. This species is to be expected in the park from rock-outcrops in Coconino, Garfield, Kane, and San Juan Counties. Occurs in NABR, CALA, GRCA, CARE, GSENM.

Cichorium intybus L. - CHICORY

atlas No voucher for this species could be found. This species is to be expected in the park from disturbed sites in Kane and San Juan Counties. Occurs in GRCA, GSENM.

Cirsium wheeleri (Gray) Petrak - WHEELER'S THISTLE

No voucher for this species could be found. This species is to be expected in the park from mountain brush and pinon-juniper communities in Garfield, Kane, and San Juan Counties. Occurs in GRCA, GSENM.

Ericameria parryi (Gray) Nesom & Baird - PARRY'S RABBITBRUSH

[*Chrysothamnus parryi* (Gray) Greene]; No voucher for this species could be found. This species is to be expected in the park from sagebrush and pinon-juniper communities in Garfield, Kane, and Wayne Counties. Occurs in BRYC, ARCH, GRCA, CARE, GSENM.

Erigeron eatonii Gray - EATON'S FLEABANE

atlas No voucher for this species could be found. This species is to be expected above 5,500' in Glen Canyon NRA. Occurs in BRYC, GRCA, CARE, GSENM.

Gaillardia spathulata Gray - WESTERN BLANKETFLOWER

atlas No voucher for this species could be found. This species is to be expected in the park from desert shrub communities of Garfield, San Juan, and Wayne Counties. Occurs in ARCH, CALA, CARE, GSENM.

Grindelia squarrosa (Pursh) Dunal - CURLYCUP GUMWEED

No voucher for this species could be found. This species is to be expected in the park from desert shrub or sagebrush communities. Occurs in BRYC, CALA, GRCA, CARE, GSENM.

Helianthella microcephala (Gray) Gray - PURPLEDISK HELIANTHELLA

No voucher for this species could be found. This species is to be expected in the park from desert shrub to pinon-juniper communities. Occurs in NABR, GRCA, CARE, GSENM.

Heliomeris longifolia (Robins. & Greenm.) Cockerell - LONGLEAF FALSE GOLDENEYE

[*Viguiera longifolia* (Robins. & Greenm.) Blake]; **atlas** No voucher for this species could be found. This species is to be expected in the park from salt desert shrub and pinon-juniper communities in Coconino, Kane and San Juan Counties. Occurs in GRCA, GSENM.

+*Isocoma acradenia* (Greene) Greene - ALKALI GOLDENBUSH

[*Haplopappus acradenius* (Greene) Blake]; No voucher for this species could be found. This species is not included in "A Utah Flora" (2003), although it is listed on the USDA Plants Database as occurring in Utah. In Arizona *I. acradenia* is known from southern counties as well as Grand Canyon in Coconino County. The distribution of *I. acradenia* in Grand Canyon is from Colorado River mile 47 to the Grand Wash Cliffs.

Iva axillaris Pursh - POVERTYWEED

No voucher for this species could be found. This species is to be expected in the park from riparian areas. Occurs in BRYC, CALA, CARE, GSENM.

Malacothrix torreyi Gray - TORREY'S DESERT DANDELION

Previous voucher annotated to *M. sonchoides*. It is possible that this species could occur in desert shrub communities of Coconino and Garfield Counties. Occurs in GRCA at Pasture Wash on the South Rim..

Pseudognaphalium canescens (DC.) W.A. Weber ssp. *canescens* - WRIGHT'S CUDWEED

[*Gnaphalium wrightii* Gray]; Previous voucher annotated to *P. palustre*. In Utah known from Ponderosa pine and live oak communities above 4,500'. This species is to be expected in the park above 4,500'. Occurs in GRCA, GSENM.

Senecio serra Hook. - TALL RAGWORT

Previous vouchers annotated to *S. multilobatus* and *S. spartioides*. In Utah known from above 5,500' in sagebrush to spruce-fir communities. It is possible that this species will be found in the park on the Kaiparowits Plateau.

Stenotus acaulis (Nutt.) Nutt. - STEMLESS MOCK GOLDENWEED

[*Haplopappus acaulis* (Nutt.) Gray];**atlas** No voucher for this species could be found. This species is to be expected in the park from sagebrush or pinon-juniper communities in Garfield and Kane Counties. Occurs in BRYC, CALA, CARE, GSENM.

Stephanomeria parryi Gray - PARRY'S WIRELETTUCE

No voucher for this species could be found. This species is known from Nipple Springs Road, one of only two known localities in Utah. In Arizona this species is known only from a collection near Kingman. Occurs in GRCA, GSENM.

Xylorhiza venusta (M.E. Jones) Heller - CHARMING WOODYASTER

No voucher for this species could be found. This species is to be expected in the park from salt desert shrub communities in Garfield, San Juan, and Wayne Counties. Occurs in ARCH, NABR, CALA, CARE.

Boraginaceae

Cryptantha bakeri (Greene) Payson - BAKER'S CRYPTANTHA

No voucher for this species could be found. This species is to be expected in the park from sagebrush or pinon-juniper communities in Garfield, Kane, or San Juan Counties. Occurs in BRYC, GSENM.

Cryptantha utahensis (Gray) Greene - SCENTED CRYPTANTHA

No voucher for this species could be found. This species is to be expected in the park from desert shrub communities below 3600' in Kane County. Occurs in GRCA in the Inner Gorge below Marble Canyon.

Cryptantha wetherillii (Eastw.) Payson - WETHERILL'S CRYPTANTHA

No voucher for this species could be found. This species is to be expected in the park from salt desert shrub or pinon-juniper communities in Garfield, San Juan, or Wayne Counties. Occurs in ARCH.

Brassicaceae

**Capsella bursa-pastoris* (L.) Medik. - SHEPHERD'S PURSE

No voucher for this species could be found. This species is to be expected in the park from disturbed sites. Occurs in BRYC, GRCA, CARE, GSENM.

+*Draba verna* L. - SPRING DRABA

No voucher for this species could be found. In Utah this species is known only from northwestern counties.

Lesquerella fendleri (Gray) S. Wats. - FENDLER'S BLADDERPOD

No voucher for this species could be found. This species is to be expected in the park from pinon-juniper woodlands in San Juan County.

Rorippa nasturtium-aquaticum (L.) Hayek - WATERCRESS

[*Nasturtium officianale* Ait. f.]; No voucher for this species could be found. This species was reported by John Spence from Upper Fence Canyon, Horse-Shoe Bend Colorado River and Scorpion Canyon. Occurs in ARCH, NABR, GRCA, CARE, GSENM.

Cactaceae

+*Opuntia chlorotica* Engelm. & Bigelow - DOLLARJOINT PRICKLYPEAR

Previous voucher Clover 4335 from 1938 was annotated to an unknown taxa. Clover's 1938 collection from Lee's Ferry is housed at the University of Michigan Herbarium. Communication with Tony A. Reznicek, curator of vascular plants at the University of Michigan Herbarium, revealed that this collection was not filed under *O. chlorotica* and that it was likely annotated by Lyman Benson in 1964. Furthermore in Utah *O. chlorotica* is known only from Washington County and in Arizona it is known from Grand Canyon NP. Occurs in GRCA in the Inner Gourge and at higher locations.

Cannabaceae

**Cannabis sativa* L. - MARIJUANA

No voucher for this species could be found. This species is to be expected in the park from disturbed areas around Lake Powell, though all previously known populations have been extirpated. Occurs in GRCA.

Capparaceae

Cleome serrulata Pursh - ROCKY MOUNTAIN BEEPLANT

No voucher for this species could be found. This species is to be expected in the park from disturbed sites. Occurs in NABR, CALA, GRCA, CARE, GSENM.

Caryophyllaceae

Paronychia sessiliflora Nutt. - CREEPING NAILWORT

No voucher for this species could be found. This species is to be expected in the park from desert shrub to pinon-juniper communities in Garfield, San Juan and Wayne Counties. Occurs in BRYC, GRCA, CARE.

Chenopodiaceae

**Atriplex rosea* L. - TUMBLING SALTWEED

No voucher for this species could be found. This species is to be expected in the park from disturbed sites. Occurs in CALA, GRCA, CARE, GSENM.

Sarcobatus vermiculatus (Hook.) Torr. - GREASEWOOD

atlas No voucher for this species could be found. This species was reported by John Spence from Middle Moody Canyon. Occurs in BRYC, ARCH, NABR, CALA, CARE, GSENM.

Cuscutaceae

+*Cuscuta cephalanthi* Engelm. - BUTTONBUSH DODDER

Voucher DEB 138 annotated to unknown taxa. Known in Utah from Cache, Salt Lake, and Uintah Counties but not from the Glen Canyon NRA region.

+*Cuscuta indecora* Choisy - BIGSEED ALFALFA DODDER

No voucher for this species could be found. Known in Utah from Box Elder, Cache, Davis, Millard, Salt Lake, Uintah, and Utah Counties but not from the Glen Canyon NRA region.

Fabaceae

Lathyrus brachycalyx Rydb. - BONNEVILLE PEA

No voucher for this species could be found. This species is to be expected in the park from sandy soils of Coconino, Garfield, Kane, and San Juan Counties. Occurs in BRYC, ARCH, CALA, GRCA, CARE, GSENM.

Hydrophyllaceae

Eucrypta micrantha (Torr.) Heller - DAINTY DESERT HIDESEED

No voucher for this species could be found. This species was reported by John Spence from the Colorado River between Glen Canyon Dam and Lee's Ferry. Occurs in GRCA, GSENM.

Phacelia heterophylla Pursh - VARILEAF PHACELIA

No voucher for this species could be found. This species is to be expected in the park from pinon-juniper woodlands. Occurs in NABR, GSENM.

Lamiaceae

**Salvia aethiopis* L. - MEDITERRANEAN SAGE

No voucher for this species could be found. This species is to be expected in the park from disturbed sites in Coconino and Kane Co., but this species is not yet reported in Utah. All previously known populations have been extirpated. Occurs in GRCA in the vicinity of Grand Canyon Village.

Salvia dorrii (Kellogg) Abrams - PURPLE SAGE

No voucher for this species could be found. This species is to be expected in the park from desert shrub communities in Coconino and Kane Counties. Occurs in GRCA, GSENM.

Malvaceae

Sphaeralcea rusbyi Gray - RUSBY'S GLOBEMLALLOW

Previous voucher annotated to *S. parvifolia*. In Utah this species is known only from Washington County, though it possibly occurs in Glen Canyon NRA above and around Lee's Ferry, Coconino Co., Arizona.

Onagraceae

Oenothera cavernae Munz - CAVEDWELLING EVENING-PRIMROSE

No voucher for this species could be found. This species is to be expected in the park from desert shrub communities in Coconino, Kane and San Juan Counties. The Arizona Flora reported this species as occurring north and west of Navajo Bridge. Occurs in GRCA.

+*Oenothera coronopifolia* Torr. & Gray - CROWNLEAF EVENING-PRIMROSE

Previous vouchers annotated to *Camissonia boothii* and *O. pallida*. In Utah only known to grow above 6,500'. Occurs in BRYC, GRCA, CARE.

Papaveraceae

Eschscholzia californica Cham. - CALIFORNIA POPPY

No voucher for this species could be found. This species is to be expected along roads in Glen Canyon NRA. This species is used in reclamation seedings. Occurs in GRCA.

Polemoniaceae

Eriastrum eremicum (Jepson) Mason - DESERT WOOLLYSTAR

No voucher for this species could be found. In Utah known only from Washington County, though it possibly occurs in Glen Canyon NRA above and around Lee's Ferry, Coconino Co., AZ. Occurs in GRCA.

Leptodactylon watsonii (Gray) Rydb. - WATSON'S PRICKLY PHLOX

Previous voucher annotated to *Phlox austromontana* var. *lutescens*, to be expected in desert shrub to pinon-juniper communities in all GLCA NRA Cos. This species is to be expected in the park from crevices in desert shrub to pinon-juniper woodland. Occurs in ARCH, CALA, CARE, GSENM.

Polygonaceae

+*Eriogonum brachypodium* Torr. & Gray - PARRY'S BUCKWHEAT

Previous voucher annotated to *E. deflexum*. In Utah known only from Washington County. In Arizona *E. brachypodium* is reported from a cinder cone at west base of Vulcans Throne, Grand Canyon NP.

Polygonum persicaria L. - SPOTTED LADYTHUMB

No voucher for this species could be found. This species was reported by John Spence from Millard Canyon and is to be expected along lake margins. Occurs in GRCA, GSENM.

Portulacaceae

+*Claytonia perfoliata* Donn ex Willd. - MINER'S LETTUCE

[*Montia perfoliata* (Donn ex Willd.) T.J. Howell]; No voucher for this species could be found. Distributed in western counties in Utah, not including the Glen Canyon NRA region. Occurs in GRCA.

Ranunculaceae

+*Ranunculus acris* L. - TALL BUTTERCUP

No voucher for this species could be found. In Utah *R. acris* known only along the Sevier River above 5,850'.

Rosaceae

Amelanchier alnifolia (Nutt.) Nutt. ex M. Roemer - SASKATOON SERVICEBERRY

Previous voucher JRS 5231 annotated to *A. utahensis*. It is possible that this species occurs in Glen Canyon NRA. Occurs in CALA, CARE, GSENM.

Holodiscus dumosus (Nutt. ex Hook.) Heller - ROCKSPIREA

atlas No voucher for this species could be found. This species is to be expected in the park from Glen Canyon NRA and has been reported from Millers Canyon. Occurs in BRYC, ARCH, NABR, CALA, GRCA, CARE, GSENM.

Potentilla biennis Greene - BIENNIAL CINQUEFOIL

No voucher for this species could be found. It is possible that this species occurs in moist soils in Garfield County and along the Colorado River. Occurring in CALA, GRCA.

Prunus virginiana L. - CHOKECHERRY

No voucher for this species could be found. This species was reported by S. Flowers in 1958, possibly all populations were inundated by Lake Powell as it has not been collected after the completion of Glen Canyon Dam and Lake Powell. Occurs in BRYC, NABR, CALA, GRCA, GSENM.

Rubiaceae

Galium trifidum L. - THREEPETAL BEDSTRAW

Previous voucher annotated to *G. proliferum*. It is possible that this species occurs in moist soils of Garfield, Kane, and San Juan Counties. Occurs in BRYC, GRCA, CARE, GSENM.

Salicaceae

Salix amygdaloides Anderss. - PEACHLEAF WILLOW

Previous voucher annotated to *S. gooddingii*. This species was reported by John Spence from Good-Hope Bay. Occurs in ARCH, CALA, CARE.

Scrophulariaceae

Linaria dalmatica (L.) P. Mill. - DALMATIAN TOADFLAX

No voucher for this species could be found. This species is was reported by Tina Ayers (Curator of Deaver Herbarium) from Lee's Ferry. Occurs in ARCH, GRCA, GSENM.

Mimulus floribundus Lindl. - MANYFLOWERED MONKEYFLOWER

No voucher for this species could be found. This species is to be expected in the park from seeps, springs, and hanging gardens of Coconino and Kane Counties. Occurs in GSENM.

Mimulus suksdorfii Gray - SUKSDORF'S MONKEYFLOWER

No voucher for this species could be found. This species is to be expected in the park from sagebrush and pinon-juniper communities in Kane and San Juan Counties. Occurs in GRCA, GSENM.

Penstemon barbatus (Cav.) Roth - BEARDLIP PENSTEMON

No voucher for this species could be found. It is possible that this species occurs in Glen Canyon NRA above 5,200' in Garfield, Kane, and Wayne Counties. Occurs in ARCH, NABR, CALA, GRCA, CARE, GSENM.

+*Penstemon latus* Pennell - HANDSOME BEARDTONGUE

No voucher for this species could be found. In Utah known only from the Abajo Mtns. and near Natural Bridges National Monument both in San Juan County. Occurs in NABR.

Penstemon moffatii Eastw. - MOFFATT'S BEARDTONGUE

atlas No voucher for this species could be found. It is possible that this species occurs in Glen Canyon NRA in clayey soils of Garfield, San Juan, or Wayne Counties. Occurs in CARE.

Penstemon strictus Benth. - ROCKY MOUNTAIN PENSTEMON

No voucher for this species could be found. It is possible that this species occurs in Glen Canyon NRA above 6,000' in Garfield, San Juan, or Wayne Counties. Occurs in BRYC, NABR, CALA, CARE.

Penstemon thompsoniae (Gray) Rydb. - THOMPSON'S BEARDTONGUE

Atlas No voucher for this species could be found. This species is to be expected in the park from pinon-juniper woodlands on calcareous soils in Kane County. Currently there is a collection from East Clark Bench, Kane Co., UT. Occurs in GSENM.

Solanaceae

Lycium torreyi Gray - TORREY WOLFBERRY

atlas No voucher for this species could be found. This species is to be expected in the park from desert shrub communities in Garfield and Wayne Counties. Occurs in CALA, GRCA.

Nicotiana attenuata Torr. ex S. Wats. - COYOTE TOBACCO

No voucher for this species could be found. This species is to be expected in the park from disturbed sites. Occurs in NABR, GRCA, CARE, GSENM.

Solanum rostratum Dunal - BUFFALOBUR NIGHTSHADE

No voucher for this species could be found. This species is to be expected in the park from disturbed sites in Coconino, Garfield, Kane, and San Juan Counties. Occurs in CALA, GRCA.

MAGNOLIOPHYTA: LILIOPSIDA

Agavaceae

Yucca baccata Torr. - BANANA YUCCA

atlas No voucher for this species could be found. This species was reported by John Spence from Warm Creek Bay. Occurs in NABR, CALA, GRCA, GSENM.

+*Yucca elata* (Engelm.) Engelm. var. *utahensis* (McKelvey) Reveal - UTAH YUCCA

[*Yucca utahensis* McKelvey]; Previous voucher annotated to *Y. angustissima* var. *toftiae* based on flower size. In Utah this species is known only from Washington County. Occurs in GRCA.

Cyperaceae

Carex nebrascensis Dewey - NEBRASKA SEDGE

No voucher for this species could be found. This species was reported by John Spence from East End Spring on Navajo Point. Occurs in BRYC, ARCH, CALA, GRCA, CARE, GSENM.

+*Carex vesicaria* L. - BLISTER SEDGE

No voucher for this species could be found. Known in Utah but not from the Glen Canyon NRA region. Occurs in GSENM.

+*Cyperus acuminatus* Torr. & Hook. ex Torr. - TAPERTIP FLATSEDGE

No voucher for this species could be found. In Utah known only from Millard County.

Cyperus erythrorhizos Muhl. - REDROOT FLATSEDGE

No voucher for this species could be found. This species is to be expected in the park from riparian areas of Glen Canyon NRA in Coconino, Garfield, Kane, and San Juan Counties. Occurs in ARCH, GRCA.

Schoenoplectus americanus (Pers.) Volk. ex Schinz & R. Keller - CHAIRMAKER'S BULRUSH

[*Scirpus americanus* Pers.]; No voucher for this species could be found. This species is to be expected in the park from riparian areas in Wayne County. Occurs in ARCH, CALA, GRCA, GSENM.

Schoenoplectus pungens (Vahl) Palla - COMMON THREESQUARE

[*Scirpus pungens* Vahl]; No voucher for this species could be found. This species is to be expected in the park from riparian areas. Occurs in BRYC, CALA, GRCA, CARE, GSENM.

+*Scirpus pallidus* (Britt.) Fern. - CLOAKED BULRUSH

Previous voucher annotated to *S. maritimus*. In Utah known only from Uintah and Utah Counties.

Iridaceae

Sisyrinchium demissum Greene - STIFF BLUE-EYED GRASS

No voucher for this species could be found. This species was reported by John Spence from East End Spring on Navajo Point. Occurs in BRYC, GRCA, CARE, GSENM.

Lemnaceae

Lemna minuta Kunth - LEAST DUCKWEED

No voucher for this species could be found. This species is to be expected in the park from ponds, lakes, and sluggish streams. Occurs in GRCA.

Liliaceae

+*Zigadenus elegans* Pursh - MOUNTAIN DEATHCAMAS

Previous voucher annotated to *Z. paniculatus*. In Utah this species is known only from elevations above 6,500'. Occurs in BRYCE, ARCH, NABR, CALA, GRCA, CARE.

Poaceae

Bothriochloa laguroides (DC.) Herter - SILVER BEARDGRASS

No voucher for this species could be found. This species is to be expected in the park from Glen Canyon NRA from disturbed sites and along roadsides in Kane Co. Occurs in CALA, GRCA.

**Bromus catharticus* Vahl - RESCUEGRASS

No voucher for this species could be found. This species is to be expected in the park from Glen Canyon NRA from disturbed sites in Garfield, Kane, and Wayne Cos. Occurs in GRCA, CARE.

Cenchrus longispinus (Hack.) Fern. - MAT SANDBUR

No voucher for this species could be found. This species is to be expected in the park from disturbed sites. Occurs in ARCH, CARE, GSENM.

**Poa annua* L. - ANNUAL BLUEGRASS

No voucher for this species could be found. This species is to be expected in the park from Glen Canyon NRA from disturbed sites in Garfield County. Occurs in GRCA.

APPENDIX III

PLANT EXTRATED FROM

GLEN CANYON NRA AFTER

THE COMPLETION OF

GLEN CANYON DAM

The following list is of vascular plant species that were collected prior to the completion of the Glen Canyon Dam (before 1964) and have not been documented since. A plus sign (+) preceding the species name indicates voucher specimens that were not inspected to assure correct identification. See Appendix B for park acronyms.

Asteraceae

+Erigeron argentatus Gray

This species was collected by Flowers and Lindsey (s.n.) in 1959 and is known from the following surrounding parks NABR, CALA, and GSENM.

+Isocoma pluriflora (Torr. & Gray) Greene

This species was collected by Clover (4342) in 1938 at Lee's Ferry. This species is not known in UT, but is known from Grand Canyon NP. In Grand Canyon NP *I. pluriflora* is reported from the North Rim and various Inner Gorge locations, though collections are thought to maybe be *I. acradenia* (Phillips et. al, 1987).

+Symphyotrichum ciliatum (Ledeb.) Nesom

Collected by Flowers (s.n.) in 1959, also known from the following parks: ARCH, CARE, and GSENM.

Cactaceae

+Mammillaria tetrancistra Engelm.

It is likely that the voucher specimen for this species collected by Clover (2400) in 1938 from the mouth of Forbidding Canyon is misidentified. First, Benson's (1982) distribution map of *M. tetrancistra* does not include the GLCA NRA area. Secondly Benson annotated Clover's southwest cactus collections in 1968 and therefore would have been aware of this collection, had it been correctly identified (Tony Reznicek, pers. comm., 2005).

+Pediocactus simpsonii (Engelm.) Britt & Rose

It is possible that the voucher specimen for this species collected by Flowers (s.n.) in 1959 is misidentified. Benson's (1982) distribution map for this species doesn't include GLCA NRA, although *P. simpsonii* is present in the following parks BRYC, GRCA, and CARE.

Chenopodiaceae

+Atriplex prostrata Bouch. ex DC.

Collected by Flowers (s.n.) in 1959, in UT known from riparian habitats in San Juan and Wayne Cos.

Convolvulaceae

+Cressa truxillensis Kunth

Collected by Flowers (s.n.) 1959; in UT known from saline or alkaline habitats in Garfield Co.

Cyperaceae

Eleocharis parishii Britt.

Gaines' (864) collection was annotated to *E. palustris*. Also collected by Flowers and Lindsey (s.n.) in 1959 and is known to occur in GRCA on the North Rim and from the Inner Gorge.

Juncaginaceae

+*Triglochin maritimum* L.

Collected by Flowers (s.n.) in 1959, presently known from seeps and marshes in Garfield and San Juan Cos. Also known from the following surrounding parks: BRYC, ARCH, CARE, and GSENM.

Poaceae

+*Chloris virgata* Sw.

Collected by Flowers (s.n.) in 1959, presently known in disturbed riparian sites and from GRCA and GSENM.

+*Puccinellia nuttalliana* (J. A. Schultes) Hitch.

Collected by Flowers (s.n.) in 1959, presently known from moist sites in UT and from BRYC, CALA, CARE, and GSENM.

Polygonaceae

+*Eriogonum subreniforme* S. Wats.

Collected by Flowers (s.n.) in 1959, presently known from clayey soils in Garfield and Kane Cos, as well as from BRYC, CARE, and GSENM.

+*Rumex venosus* Pursh

Collected by Flowers (s.n.) in 1959, presently known from sand soils in Kane Co, as well as ARCH, CALA, and GSENM.

Ranunculaceae

Ranunculus sceleratus L.

Collected by Gaines (892) in 1938 from Mystery Canyon, also known from GRCA, CARE, and GSENM.

Rosaceae

+*Prunus virginiana* L.

Collected by Flowers (s.n.) in 1959, also known from NABR, CALA, and GRCA.

Scrophulariaceae

Cordylanthus parviflorus (Ferris) Wiggins

Gaines' (835) collection was annotated to *C. wrightii*. *Cordylanthus parviflorus* was also collected by Flowers (s.n.) in 1959 and is presently known from desert shrub communities in Southeastern Utah as well as BRYC, CALA, GRCA, and GSENM.

Solanaceae

+*Physalis hederifolia* Gray

Collected by Clover (2151) in 1938 near the mouth of Dark Canyon. Presently known from Cottonwood communities in Southeastern Utah and from GRCA and GSENM.